```
=> d his

     (FILE 'HCAPLUS' ENTERED AT 13:01:51 ON 14 MAR 2002)
               DEL HIS Y

     FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002
               ACT EVER/A
              ---------
L1   (      3186)SEA FILE=REGISTRY ABB=ON  14246.1.1/RID
L2   (      4284)SEA FILE=REGISTRY ABB=ON  13750.2.1/RID
L3   (     13726)SEA FILE=REGISTRY ABB=ON  14099.3.1/RID
L4   (     21151)SEA FILE=REGISTRY ABB=ON  L1 OR L2 OR L3
L5                STR
L6              77 SEA FILE=REGISTRY SUB=L4 SSS FUL L5
                ---------
L7              17 S L6 AND NC=1
L8              57 S L6 AND NC=2
L9               1 S 17465-86-0
L10              1 S 10016-20-3
L11              1 S 7585-39-9

     FILE 'HCAPLUS' ENTERED AT 13:03:52 ON 14 MAR 2002
L12             58 S L6
L13             12 S L7
L14             45 S L8
L15              1 S L14 AND (AMINOOXY? OR AMINO OXY? )
L16              6 S L14 AND DERIV?
L17              6 S L15 OR L16
L18           3781 S L9/D OR L10/D OR L11/D
L19              1 S L18 AND (AMINO OXY? OR AMINOOXY? OR AMINOOXY?/AB OR AMINO OXY
L20             17 S L19 OR L17 OR L13

     FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002

     FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002
L21         300448 S NUCLEOSID? OR NUCLEOTID? OR PYRIMIDINE?
L22              0 S L14 AND L21
L23         218299 S (NUCLEOSID? OR NUCLEOTID? OR PYRIMIDINE?)/AB
L24              0 S L23 AND L14
```

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=> fil reg
FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:   12 MAR 2002  HIGHEST RN 400707-37-1
DICTIONARY FILE UPDATES:  12 MAR 2002  HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02.  Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved.  Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies.  Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> d que l6;d his l8
L1   (      3186)SEA FILE=REGISTRY ABB=ON  14246.1.1/RID
L2   (      4284)SEA FILE=REGISTRY ABB=ON  13750.2.1/RID
L3   (     13726)SEA FILE=REGISTRY ABB=ON  14099.3.1/RID
L4   (     21151)SEA FILE=REGISTRY ABB=ON  L1 OR L2 OR L3
L5               STR

O--N
1  2


NODE ATTRIBUTES:
CONNECT IS E2  RC AT   1
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   2

STEREO ATTRIBUTES: NONE
L6           77 SEA FILE=REGISTRY SUB=L4 SSS FUL L5
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Σ includes α, α, β cyclodextrins

```
=> d his l7

     (FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002)
L7          17 S L6 AND NC=1
```

cyclodex with 1 component

```
=> d his l8

     (FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002)
L8          57 S L6 AND NC=2
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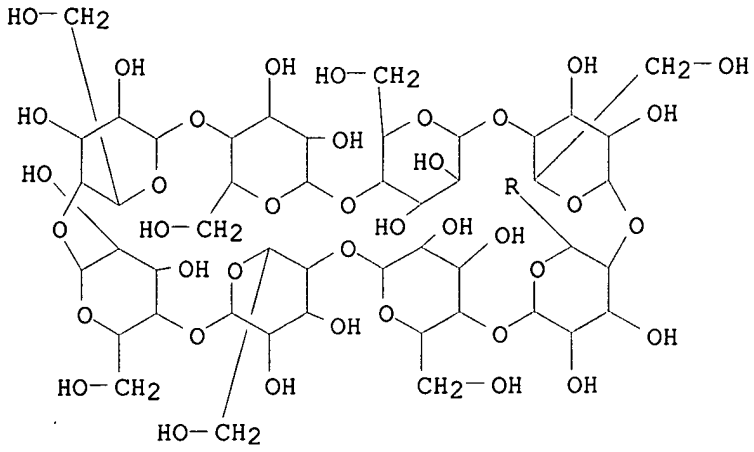
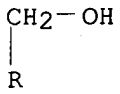
CD's with 2 components

```
=> d que l9;d l9
L9            1 SEA FILE=REGISTRY ABB=ON  17465-86-0



L9   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   17465-86-0  REGISTRY
CN   .gamma.-Cyclodextrin (8CI, 9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   2,4,7,9,12,14,17,19,22,24,27,29,32,34,37,39-Hexadecaoxanonacyclo[36.2.2.23
     ,6.28,11.213,16.218,21.223,26.228,31.233,36]hexapentacontane,
     .gamma.-cyclodextrin deriv.
OTHER NAMES:
CN   .gamma.-Dextrin
CN   Cyclomaltooctaose
CN   Cyclooctaamylose
CN   Dexy Pearl .gamma.-100
CN   Ringdex C
CN   Stereoisomer of 5,10,15,20,25,30,35,40-octakis(hydroxymethyl)-
     2,4,7,9,12,14,17,19,22,24,27,29,32,34,37,39-hexadecaoxanonacyclo[36.2.2.23
     ,6.28,11.213,16.218,21.223,26.228,31.233,36]hexapentacontane-
     41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56-hexadecol
DR   216309-81-8, 217487-02-0
MF   C48 H80 O40
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES,
       DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS,
       PHAR, PIRA, PROMT, TOXCENTER, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

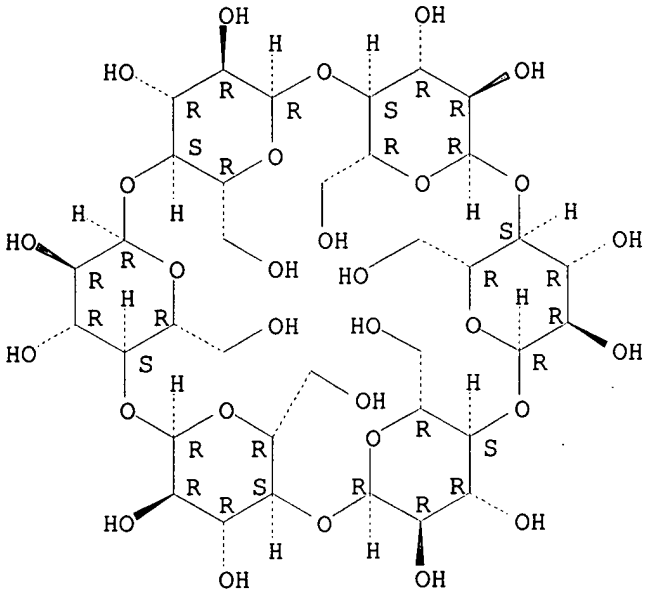
2830 REFERENCES IN FILE CA (1967 TO DATE)
623 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2840 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d que l10; d l10
L10 1 SEA FILE=REGISTRY ABB=ON 10016-20-3

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **10016-20-3** REGISTRY
CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,4,7,9,12,14,17,19,22,24,27,29-Dodecaoxaheptacyclo[26.2.2.23,6.28,11.213,16.218,21.223,26]dotetracontane, .alpha.-cyclodextrin deriv.
CN Cyclohexaamylose (6CI)
OTHER NAMES:
CN .alpha.-Cycloamylose
CN .alpha.-Dextrin
CN .alpha.-Schardinger dextrin
CN Alfadex
CN Celdex A 100
CN Cyclohexadextrin
CN Cyclomaltohexaose
CN Cyclomaltohexose
CN Dextrin, .alpha.-cyclo
CN Dexy Pearl .alpha.-100
CN Ringdex A
CN Stereoisomer of 5,10,15,20,25,30-hexakis(hydroxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29-dodecaoxaheptacyclo[26.2.2.23,6.28,11.213,

16.218,21.223,26]dotetracontane-31,32,33,34,35,36,37,38,39,40,41,42-dodecol
FS STEREOSEARCH
DR 23513-50-0, 41871-62-9, 47910-04-3
MF C36 H60 O30
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3685 REFERENCES IN FILE CA (1967 TO DATE)
733 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3695 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

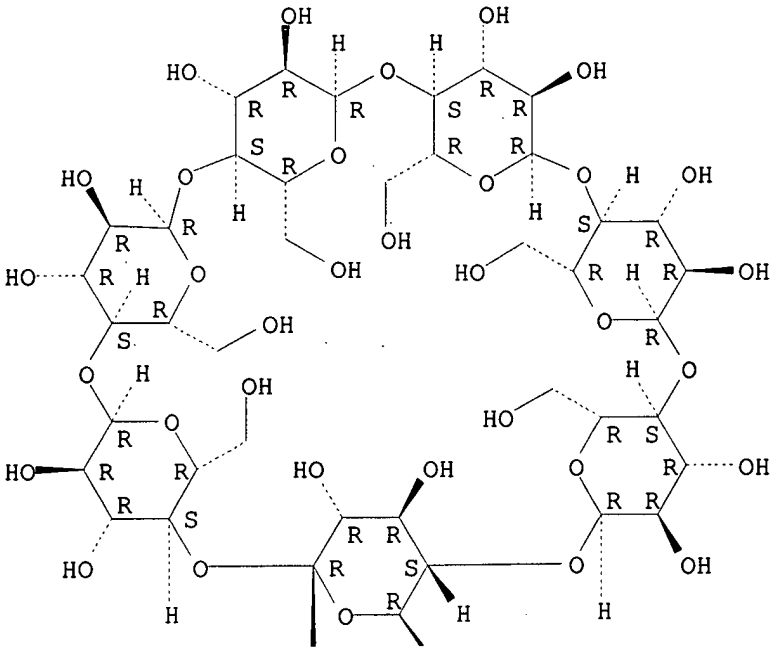
=> d que l11;d l11
L11 1 SEA FILE=REGISTRY ABB=ON 7585-39-9

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **7585-39-9** REGISTRY
CN .beta.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

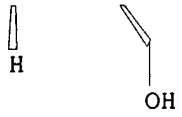
CN 2,4,7,9,12,14,17,19,22,24,27,29,32,34-Tetradecaoxaoctacyclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane, .beta.-cyclodextrin deriv.
CN Cycloheptaamylose (7CI)
OTHER NAMES:
CN .beta.-Cycloamylose
CN .beta.-Cycloheptaamylose
CN .beta.-Dextrin
CN Betadex
CN Cavamax W 7
CN Celdex B 100
CN Celdex N
CN Cycloheptaglucan
CN Cycloheptaglucosan
CN Cyclomaltoheptaose
CN Dextrin, .beta.-cyclo
CN Kleptose
CN Kleptose B
CN NSC 314334
CN Rhodocap N
CN Ringdex B
CN Ringdex BL
CN Schardinger .beta.-dextrin
CN Stereoisomer of 5,10,15,20,25,30,35-heptakis(hydroxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29,32,34-tetradecaoxaoctacyclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane-36,37,38,39,40,41,42,43,44,45,46,47,48,49-tetradecol
FS STEREOSEARCH
DR 37331-89-8, 47918-72-9
MF C42 H70 O35
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9468 REFERENCES IN FILE CA (1967 TO DATE)
3461 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9553 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002
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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his l12-

(FILE 'HCAPLUS' ENTERED AT 13:03:52 ON 14 MAR 2002)
L12 58 S L6
L13 12 S L7
L14 45 S L8
L15 1 S L14 AND (AMINOOXY? OR AMINO OXY?)
L16 6 S L14 AND DERIV?
L17 6 S L15 OR L16
L18 3781 S L9/D OR L10/D OR L11/D
L19 1 S L18 AND (AMINO OXY? OR AMINOOXY? OR AMINOOXY?/AB OR AMINO OXY
L20 17 S L19 OR L17 OR L13

FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002

FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002

=> d .ca hitstr l20 1-17

L20 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:461510 HCAPLUS
DOCUMENT NUMBER: 133:171413
TITLE: Synthesis of .beta.-cyclodextrin and glucoside compounds-bonded porphyrins and metal porphyrins
AUTHOR(S): Li, Zao-Ying; Li, Cong; Li, Li; Wang, Tie-Feng
CORPORATE SOURCE: Department of Chemistry, Northwest University, Xi'an, 710069, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2000), 21(6), 840-843
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The reaction of mono-6-hydroxy permethylated .beta.-cyclodextrin (PM .beta.-CD-CH2OH) with trifluoromethanesulfuric anhydride under N2 gave mono-6-trifluoromethanesulfonate permethylated .beta.-cyclodextrin (6). Compd. 6 reacted with nickel porphyrin [Ni(TPNH2P)] (2, H2TPNH2P = 5-(p-aminophenyl)-10,15,20-triphenylporphyrin) or [Ru(CO)(TPNH2P)] (3) to

produce .beta.-cyclodextrin linked metalloporphyrins 7 and 8. 2,3,4,6-Tetra-O-acetyl-.alpha.-D-glucopyranosyl bromide (4) and 2,3,5-tri-O-acetyl-.beta.-D-ribofuranosyl brimide(5) underwent condensation reactions with H2TPNH2P (1) to afford porphyrin-glucopyranosyl and -ribofuranosyl derivs. 9 and 10, resp. The new compds. 6-10 were identified by IR, UV-visible, 1H NMR, elemental anal., and also ESI-MS for compd. 6.

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 26, 33

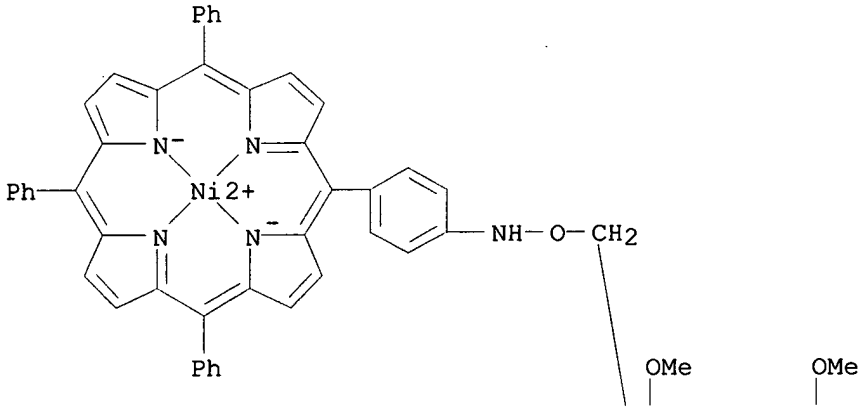
IT **287971-52-2P 287971-54-4P** 287971-56-6P 287971-58-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT **287971-52-2P 287971-54-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

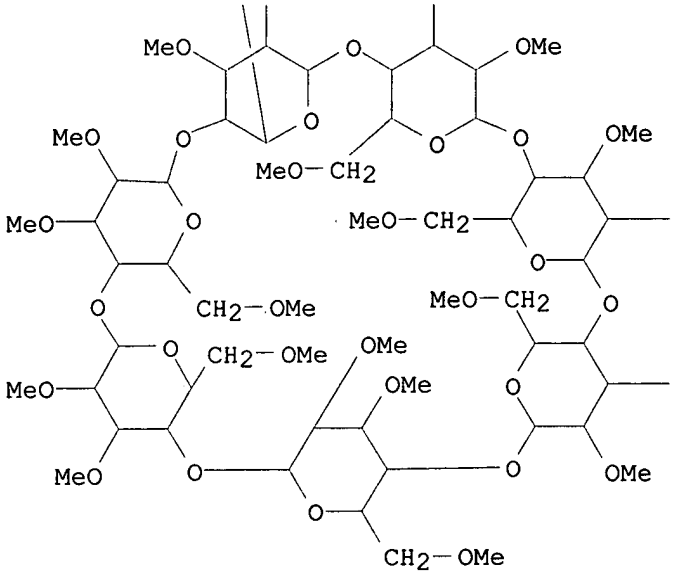
RN 287971-52-2 HCAPLUS

CN Nickel, [2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6A,6B,6C,6D,6E,6F-eicosa-.kappa.O-methyl-6G-O-[[4-(10,15,20-triphenyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]amino]-.beta.-cyclodextrinato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



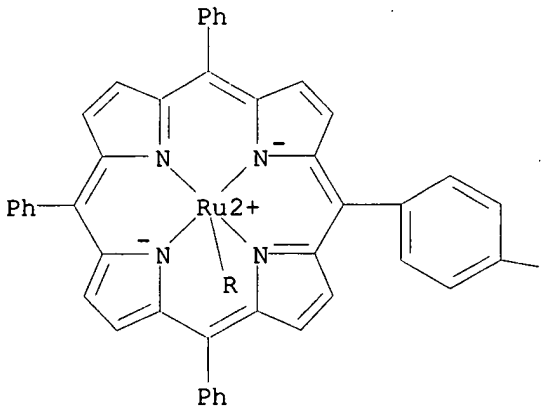
PAGE 2-B

— OMe

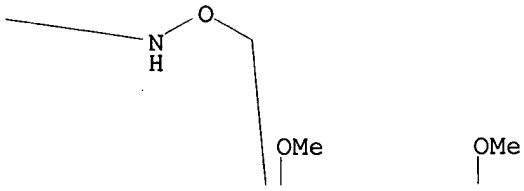
— OMe

RN 287971-54-4 HCAPLUS
CN Ruthenium, carbonyl[2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6A,6B,6C,6D,6E,6F-eicosa-.kappa.O-methyl-6G-O-[[4-(10,15,20-triphenyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]amino]-.beta.-cyclodextrinato(2-)]-, (SP-5-52)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

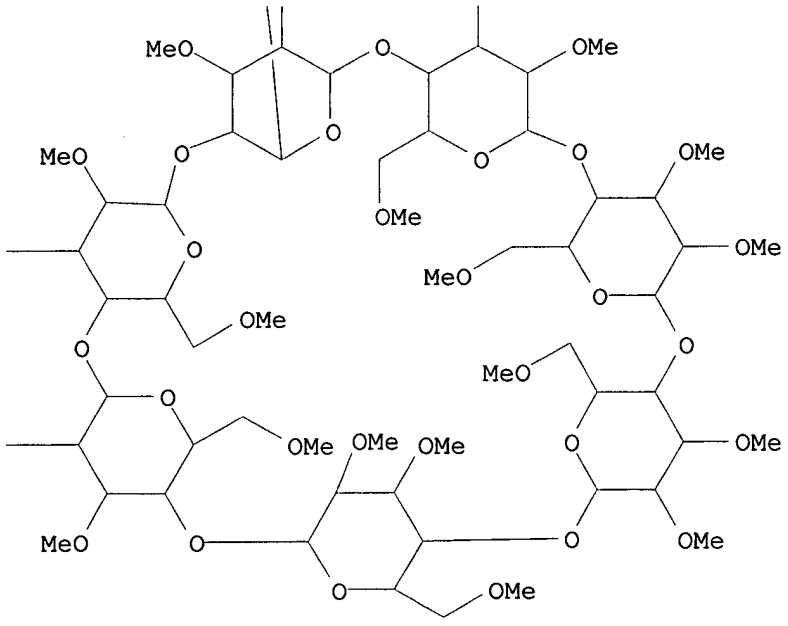


PAGE 2-A

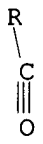
MeO—

MeO—

PAGE 2-B



PAGE 3-A



L20 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:288497 HCAPLUS

DOCUMENT NUMBER: 133:164300
TITLE: Synthesis and pharmacological properties of an .alpha.-cyclodextrin assembled neuropeptide Y fragment
AUTHOR(S): Yokokawa, Yoshihiro; Grouzmann, Eric; Bourgeois, Jean-Pascal; Eggleston, Ian; Dumy, Pascal; Tuchscherer, Gabriele; Mutter, Manfred
CORPORATE SOURCE: Pharmaco Science Research Laboratories, Shiseido Co., Ltd., Yokohama, 223, Japan
SOURCE: Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 322-323. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Akademiai Kiado: Budapest, Hung.
CODEN: 68WKAY
DOCUMENT TYPE: Conference
LANGUAGE: English

AB A symposium report. We report on the synthesis of TASP (template assembled synthetic proteins) mols. able to bind to neurotensin Y and angiotensin II receptors, in which .alpha.-cyclodextrin is used as template.

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 33

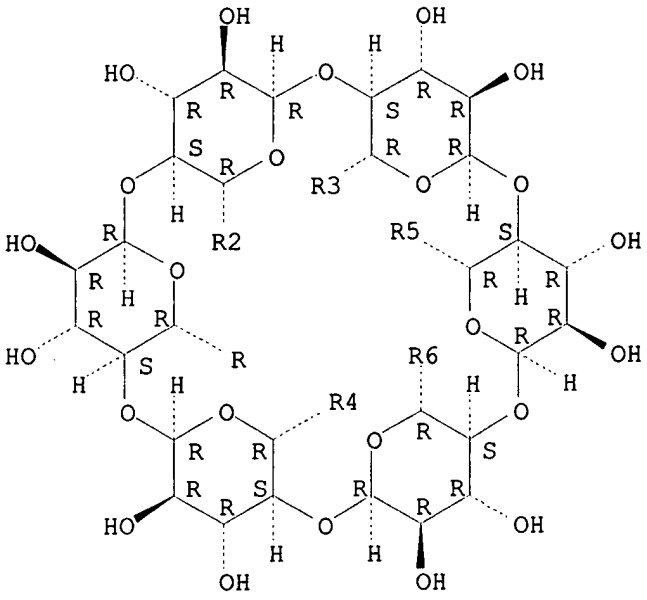
IT 52530-60-6P **287962-52-1P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and pharmacol. properties of .alpha.-cyclodextrin assembled neuropeptide Y fragment)

IT **287962-52-1P**
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and pharmacol. properties of .alpha.-cyclodextrin assembled neuropeptide Y fragment)

RN 287962-52-1 HCAPLUS
CN .alpha.-Cyclodextrin, 6A,6B,6C,6D,6E,6F-hexakis[[(aminooxy)acetyl]amino]-6A,6B,6C,6D,6E,6F-hexadeoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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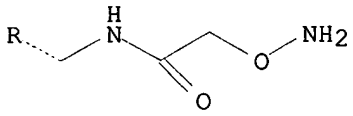
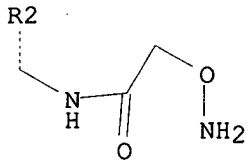
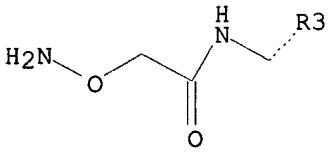
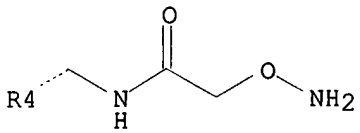
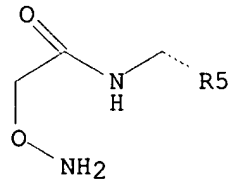


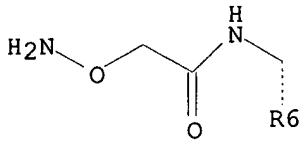




PAGE 3-A







REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:576949 HCAPLUS
DOCUMENT NUMBER: 131:215795
TITLE: Preparation of **aminooxy derivatives** of cyclodextrins
INVENTOR(S): Khomutov, Alexei Radievich; Yakovlev, Dmitry Yurievich; Khomutov, Radii Mikhailovich; Korpela, Timo
PATENT ASSIGNEE(S): Russia
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9945032	A1	19990910	WO 1999-FI167	19990304
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FI 9800489	A	19990905	FI 1998-489	19980304
AU 9926279	A1	19990920	AU 1999-26279	19990304
EP 1090041	A1	20010411	EP 1999-906292	19990304
R: DE, DK, ES, FR, GB, IT, NL, SE, FI				

PRIORITY APPLN. INFO.: FI 1998-489 A 19980304
WO 1999-FI167 W 19990304

OTHER SOURCE(S): MARPAT 131:215795

AB The title derivs. CD-(X-Y-ONH2)n (CD = mono- or polydeoxy .alpha.-, .beta.-, or .gamma.-cyclodextrin, carrying in its 6-, 3- and/or 2-position a group contg. **aminooxy** group, and optionally carrying substituents different from X-Y-ONH2; Y = linker group between **aminooxy** group and mono- or polydeoxy-CD group; X = functional group or an atom necessary to connect Y and the deoxy CD group, or Y = direct bond when X = direct bond; n .gtoreq.1 but .ltoreq.24, 21, and 18, for .alpha.-, .beta.- and .gamma.-cyclodextrin, resp.) and the protected **aminooxy** derivs. thereof, such as acetonoxime of mono-6-(2-**aminooxyethyl**)thio-6-deoxy-.beta.-cyclodextrin, are prepd.

IC ICM C08B037-16
ICS A61K047-40

CC 44-6 (Industrial Carbohydrates)

ST **aminooxy deriv** cyclodextrin; **aminooxyethylthio** deoxycyclodextrin acetonoxime

IT **242150-88-5P 242150-91-0P 242150-92-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)

IT **242150-89-6P 242150-90-9P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)

IT 54-47-7, Pyridoxal-5-phosphate 67-64-1, 2-Propanone, reactions 574-25-4, 6-Mercaptopurine riboside 591-28-6, 4-Thiouracil **7585-39-9D**, .beta.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers **10016-20-3D**, .alpha.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers **17465-86-0D**, .gamma.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers 60302-08-1 60302-09-2 67217-55-4, Mono-6-O-tosyl-.beta.-cyclodextrin 112174-48-8 242150-87-4
RL: RCT (Reactant)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)

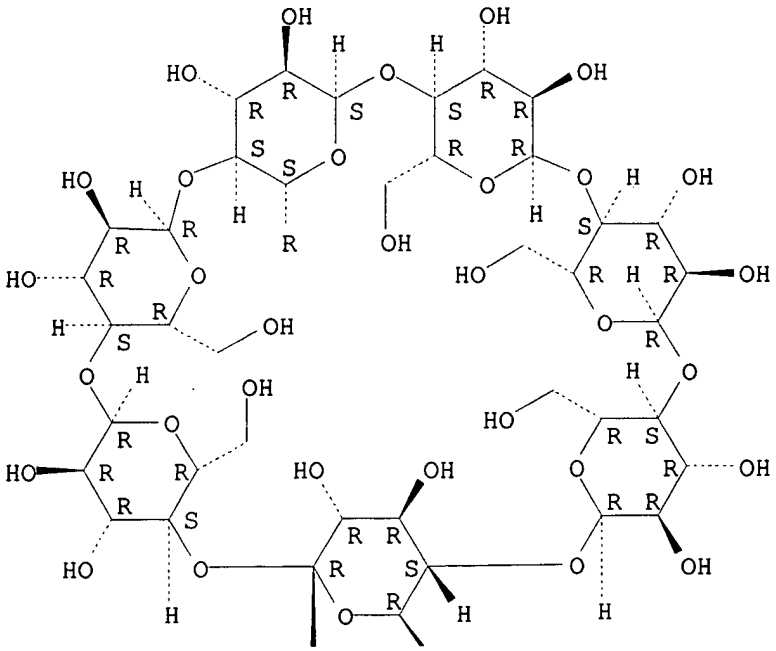
IT **242150-88-5P 242150-91-0P 242150-92-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)

RN 242150-88-5 HCAPLUS

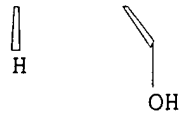
CN .beta.-Cyclodextrin, 6A-S-[2-[[(1-ethoxyethylidene)amino]oxy]ethyl]-6A-thio- (9CI) (CA INDEX NAME)

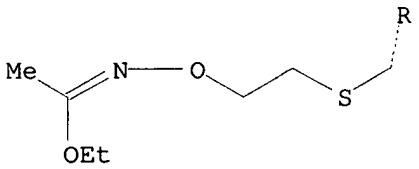
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 2-A

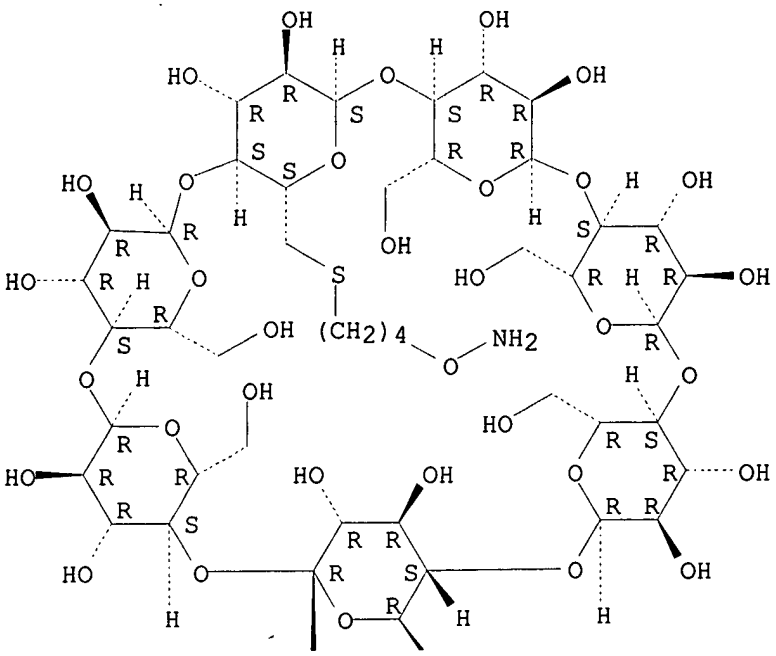




RN 242150-91-0 HCAPLUS
CN .beta.-Cyclodextrin, 6A-S-[4-(aminooxy)butyl]-6A-thio-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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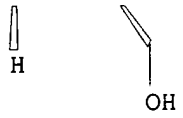
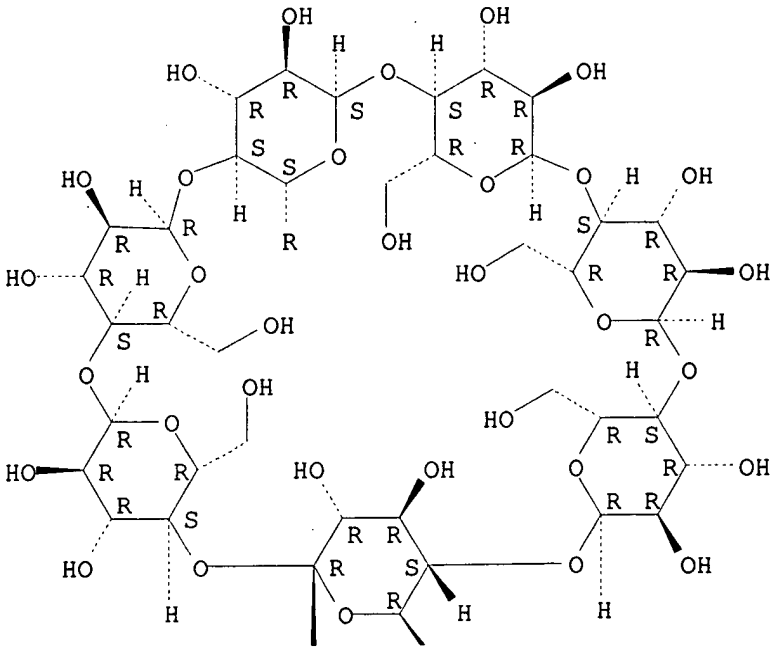


● HCl

RN 242150-92-1 HCAPLUS
CN .beta.-Cyclodextrin, 6A-S-[2-[[(1-methylethylidene)amino]oxy]ethyl]-6A-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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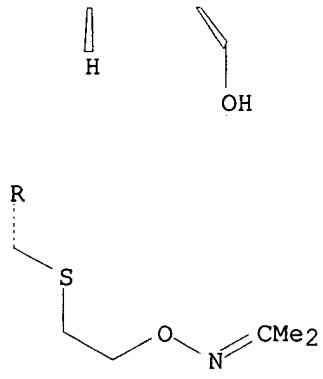
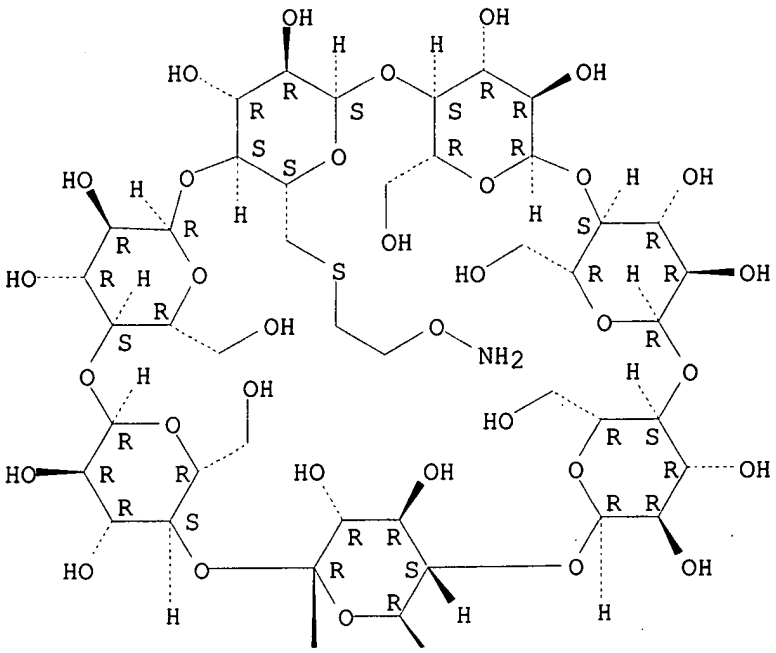


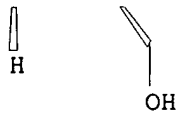
IT **242150-89-6P 242150-90-9P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)
RN 242150-89-6 HCAPLUS
CN .beta.-Cyclodextrin, 6A-S-[2-(aminooxy)ethyl]-6A-thio-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

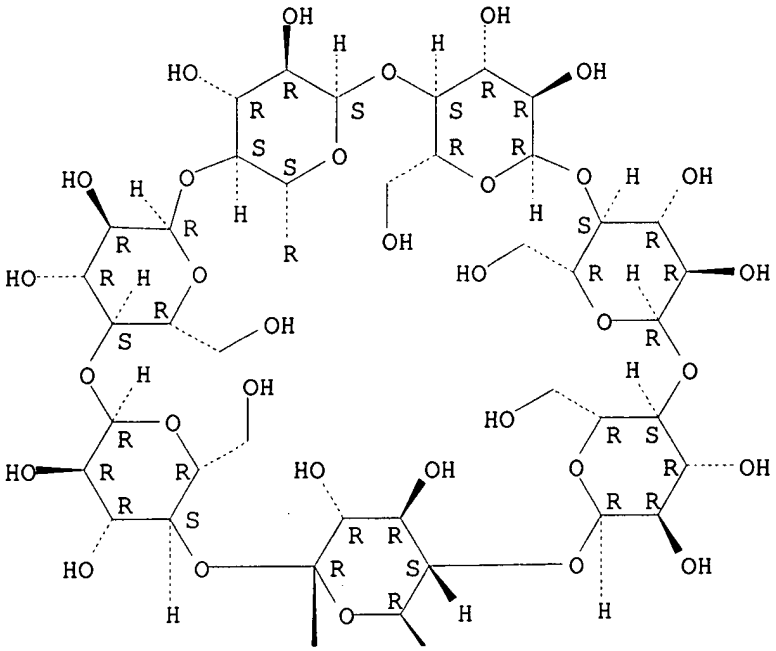


● HCl

RN 242150-90-9 HCAPLUS
CN .beta.-Cyclodextrin, 6A-S-[4-[[(1-ethoxyethylidene)amino]oxy]butyl]-6A-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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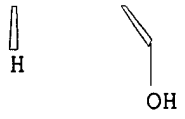
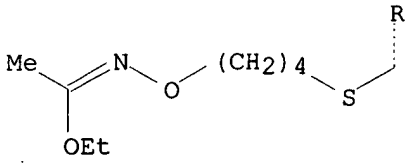
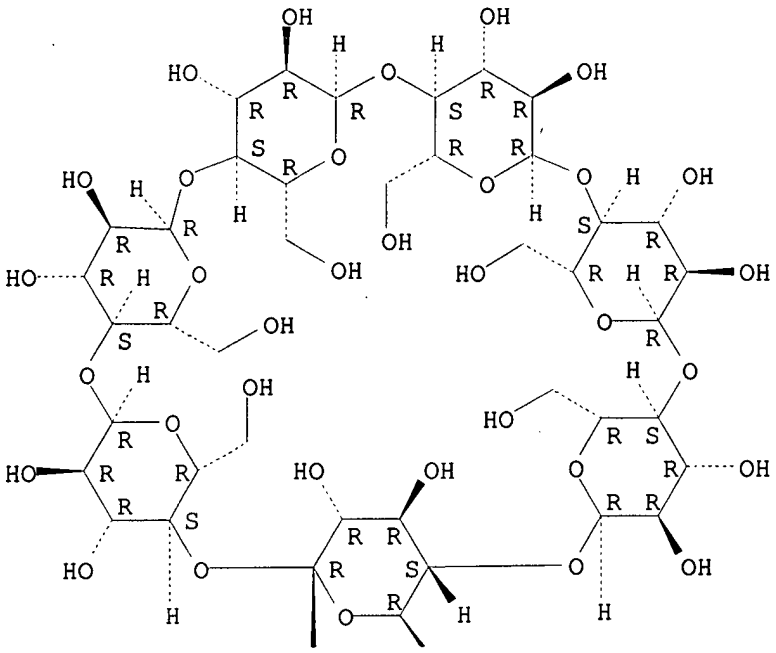




IT **7585-39-9D**, .beta.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers **10016-20-3D**, .alpha.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers **17465-86-0D**, .gamma.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers
RL: RCT (Reactant)
(prepn. of **aminooxy**-cyclodextrin **derivs**. and protected **derivs**.)
RN 7585-39-9 HCAPLUS
CN .beta.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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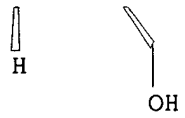
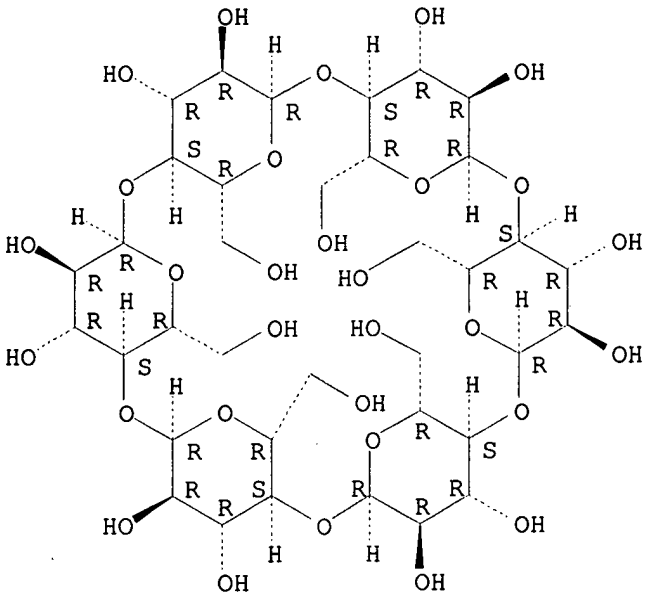
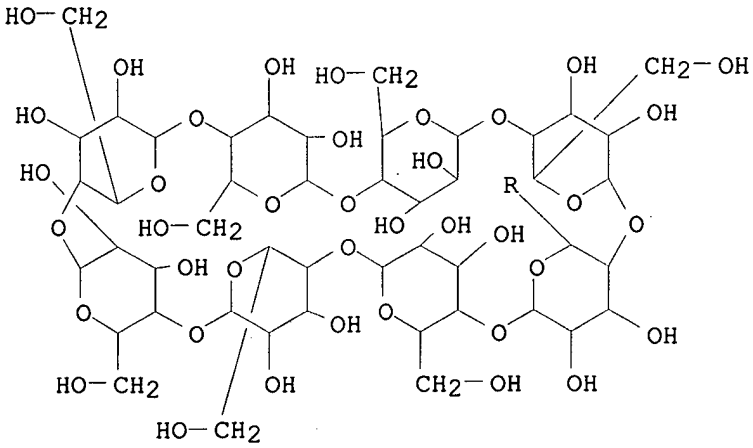


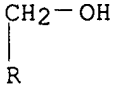
RN 10016-20-3 HCAPLUS
CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 17465-86-0 HCAPLUS
CN .gamma.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)





REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:295973 HCAPLUS
DOCUMENT NUMBER: 131:15633
TITLE: Burst kinetics and turnover in an esterase mimic
AUTHOR(S): Breslow, Ronald; Nesnas, Nasri

CORPORATE SOURCE: Department of Chemistry, Columbia University, New York, NY, 10027, USA
SOURCE: Tetrahedron Lett. (1999), 40(17), 3335-3338
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A catalyst combining a cyclodextrin binding group with a bound zinc cation and an oxime anion cleaves bound esters in a two step process. The hydrolysis kinetics of p-nitrophenyl acetate and p-tert-butylphenyl acetate were studied using the zinc catalyst. The zinc complex catalyst was shown work faster than analogous nickel(II) or copper(II) complexes and zinc bound to the cyclodextrin with the oxime functional group on the secondary face is preferred over that bound to the primary face.

CC 7-4 (Enzymes)
Section cross-reference(s): 22, 33, 67

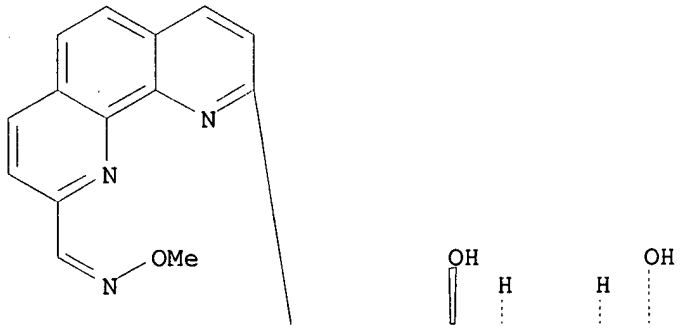
IT **226421-11-0**
RL: BSU (Biological study, unclassified); CAT (Catalyst use); RCT (Reactant); BIOL (Biological study); USES (Uses)
(procatalyst for zinc cyclodextrin oximato deriv. complex esterase mimic)

IT **226421-11-0**
RL: BSU (Biological study, unclassified); CAT (Catalyst use); RCT (Reactant); BIOL (Biological study); USES (Uses)
(procatalyst for zinc cyclodextrin oximato deriv. complex esterase mimic)

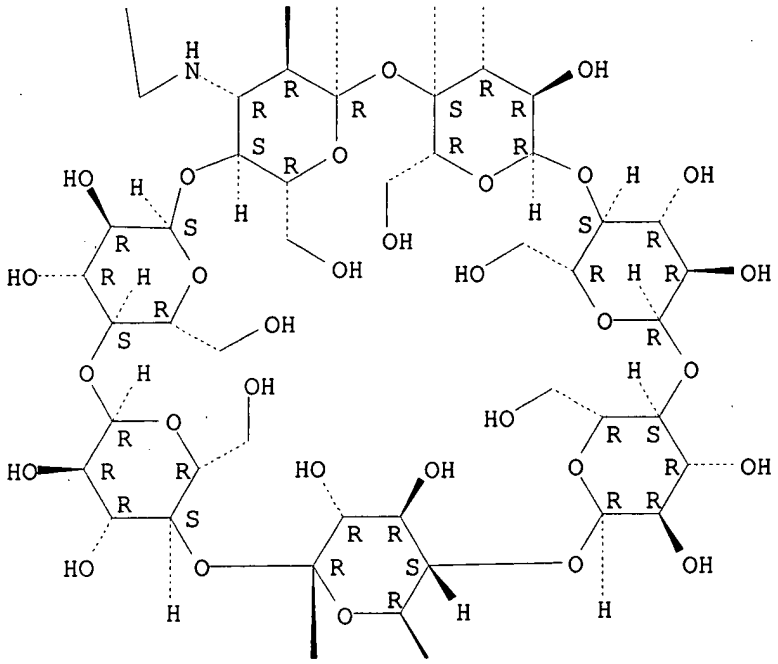
RN 226421-11-0 HCAPLUS
CN .beta.-Cyclodextrin, 3A-deoxy-3A-[[[9-[(methoxyimino)methyl]-1,10-phenanthrolin-2-yl]methyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

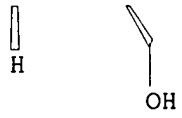
PAGE 1-A



PAGE 2-A



PAGE 3-A



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:600670 HCAPLUS
DOCUMENT NUMBER: 129:302779
TITLE: Effects of solvents on the chirality of ferrichrome-mimicking Fe3+ complexes based on .alpha.-cyclodextrin
AUTHOR(S): Hori, Yuji; Tamagaki, Seizo
CORPORATE SOURCE: Dep. of Bioapplied Chemistry, Faculty of Engineering, Osaka City University, Osaka, 558-8585, Japan
SOURCE: Nippon Kagaku Kaishi (1998), (9), 602-608
CODEN: NKAKB8; ISSN: 0369-4577
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB An .alpha.-cyclodextrin-based three-fold sym. tripodal ferrichrome mimic contg. three MeN(OH)COCH2CH2CONH side chains [I; R = NHCOCH2CH2CON(OH)Me] was designed and synthesized. The chirality of its complex with Fe3+ ion

was examd. in various solvents such as water, methanol, and acetonitrile by using CD spectroscopy. The chirality varied remarkably with changing solvents. A mechanism involving hydrogen-bonding with solvent, which dets. the chirality, was proposed.

CC 33-7 (Carbohydrates)
Section cross-reference(s): 68, 78

IT 127-06-0P, Acetone oxime 622-33-3P, O-Benzylhydroxylamine 3376-36-1P 22513-22-0P, N-Methyl-O-benzylhydroxylamine 214556-56-6P 214556-57-7P **214556-59-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (effects of solvents on chirality of ferrichrome-mimicking Fe3+ complexes based on .alpha.-cyclodextrin)

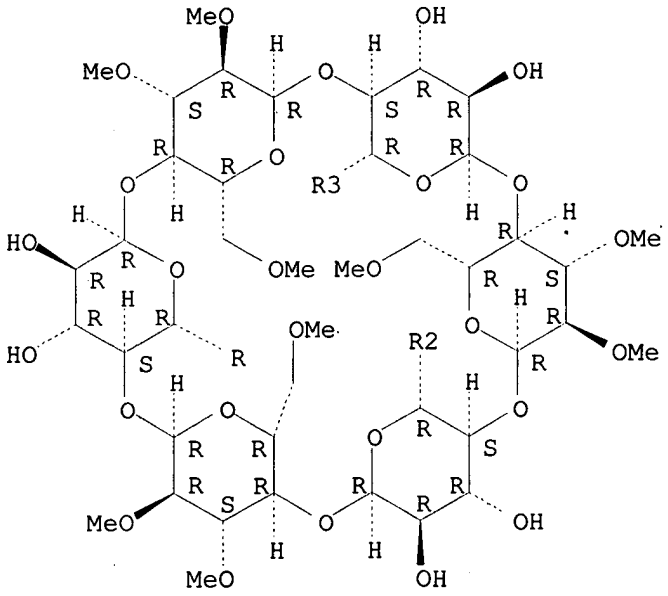
IT **214556-59-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (effects of solvents on chirality of ferrichrome-mimicking Fe3+ complexes based on .alpha.-cyclodextrin)

RN 214556-59-9 HCAPLUS

CN .alpha.-Cyclodextrin, 6B,6D,6F-trideoxy-2A,2C,2E,3A,3C,3E,6A,6C,6E-nona-O-methyl-6B,6D,6F-tris[[4-[methyl(phenylmethoxy)amino]-1,4-dioxobutyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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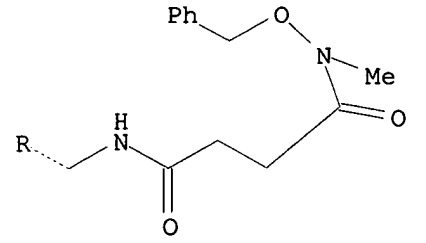
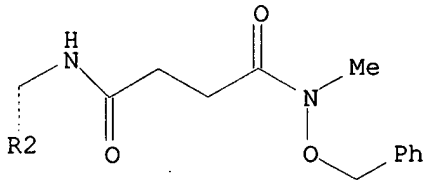
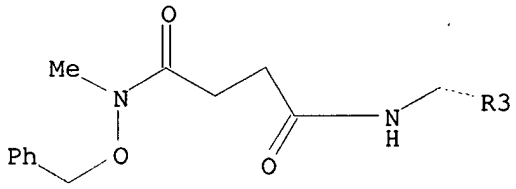




PAGE 3-A



L20 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:108750 HCAPLUS
DOCUMENT NUMBER: 126:225489
TITLE: Synthesis and biological evaluation of 2-amino-2-deoxy- and 6-amino-6-deoxy-cyclomaltoheptaose polysulfates as synergists for angiogenesis inhibition
AUTHOR(S): Sakairi, Nobuo; Kuzuhara, Hiroyoshi; Okamoto, Taira; Yajima, Motoyuki
CORPORATE SOURCE: The Institute of Physical and Chemical Research (RIKEN), Saitama, 351-01, Japan
SOURCE: Bioorg. Med. Chem. (1996), 4(12), 2187-2192
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 2-Amino-2-deoxy-cyclomaltoheptaose was prepd. from .beta.-cyclodextrin perbenzoate [heptakis(2,3,6-tri-O-benzoyl)cyclomaltoheptaose] by a series of reactions including selective de-O-benzoylation at C-2 of one of the perbenzoylated D-glucopyranosyl moieties, oxidn. to the 2-ulose deriv., oxime formation, and redn. to the 2-amino-2-deoxy-D-glucose moiety. This compd. and 6-amino-6-deoxycyclomaltoheptaose accessible from .beta.-cyclodextrin through the known procedure were sulfated to give polysulfated aminocyclomaltoheptaoses. Employing .beta.-cyclodextrin

polysulfate as a ref. compd., the synergistic effects of title compds. for cortexolone on angiogenesis inhibitory activity were examd. by rabbit-corneal micropocket assay system. In contrast to the significant anti-angiogenesis activity of the .beta.-cyclodextrin polysulfate-cortexolone pair, neither one of title compds. showed any cooperative activity with cortexolone in the inhibition of basic FGF-induced angiogenesis.

CC 33-8 (Carbohydrates)
Section cross-reference(s): 1

IT 134308-79-5P 188262-65-9P **188262-67-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antiangiogenesis of 2-amino-2-deoxy- and 6-amino-6-deoxy-cyclomaltoheptaose polysulfates)

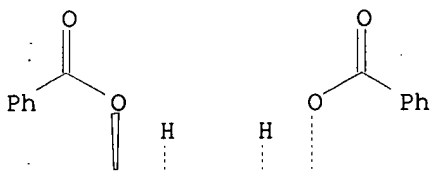
IT **188262-67-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antiangiogenesis of 2-amino-2-deoxy- and 6-amino-6-deoxy-cyclomaltoheptaose polysulfates)

RN 188262-67-1 HCAPLUS

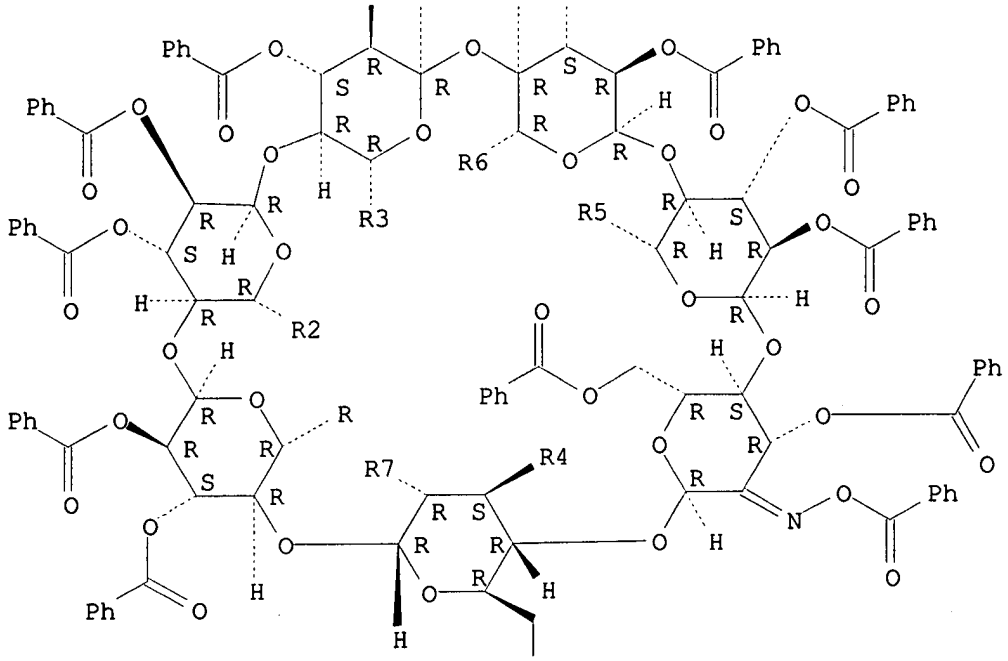
CN .beta.-Cyclodextrin, 2A-[(benzoyloxy)imino]-2A-deoxy-, 2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6A,6B,6C,6D,6E,6F,6G-eicosabenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

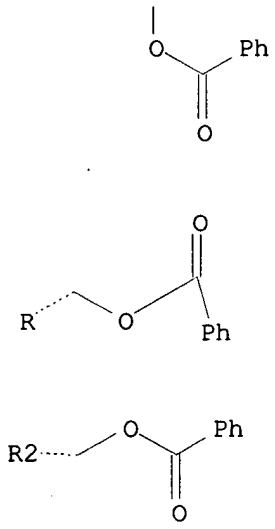
PAGE 1-A



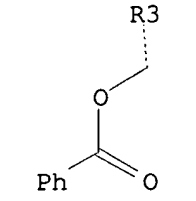
PAGE 2-A

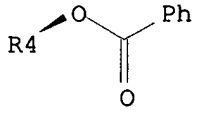


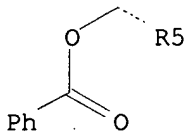
PAGE 3-A



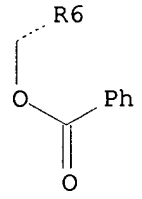
PAGE 4-A

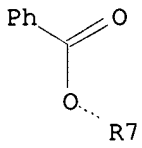






PAGE 5-A





L20 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:846948 HCAPLUS
DOCUMENT NUMBER: 123:313193
TITLE: Preassociating .alpha.-Nucleophiles Based on .beta.-Cyclodextrin. Their Synthesis and Reactivity
AUTHOR(S): Martin, Kristy A.; Mortellaro, Mark A.; Sweger, Robert W.; Fikes, Lewis E.; Winn, David T.; Clary, Scott; Johnson, Morgan P.; Czarnik, Anthony W.
CORPORATE SOURCE: Department of Chemistry, Ohio State University, Columbus, OH, 43210, USA
SOURCE: J. Am. Chem. Soc. (1995), 117(42), 10443-8
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have expanded the field of enzyme mimics based on .beta.-cyclodextrin (.beta.CD) by attaching .alpha.-nucleophiles to the primary and secondary sides of the cyclodextrin cavity. Six new materials have been prepd. in which .beta.CD has been modified by hydrazine, hydroxylamine, oxime, and hydroperoxide functionalities. Transacylating studies with p-NPA have demonstrated that the primary-side hydroxylamine shows the highest reactivity with a 1900-fold increase in rate over .beta.CD at pH 6.5. Other .alpha.-nucleophiles show less remarkable rate increases in this system but, in some cases, demonstrate hydrogen-bonding to the cyclodextrin rim and inhibition kinetics.

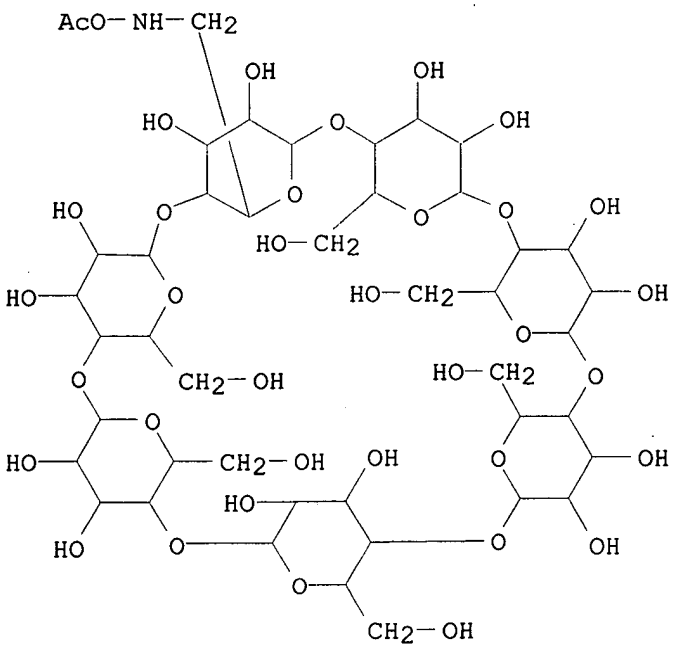
CC 22-4 (Physical Organic Chemistry)

IT **138435-34-4P** 138435-35-5P 170123-94-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactivity of .alpha.-nucleophiles based on cyclodextrin)

IT **138435-34-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactivity of .alpha.-nucleophiles based on cyclodextrin)

RN 138435-34-4 HCAPLUS

CN .beta.-Cyclodextrin, 6A-[(acetyloxy)amino]-6A-deoxy- (9CI) (CA INDEX NAME)



L20 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:502017 HCAPLUS

DOCUMENT NUMBER: 121:102017

TITLE: Insecticidal compositions containing inclusion compounds of cyclodextrin and triazole **derivatives**

INVENTOR(S): Ikeuchi, Toshisuke; Misumi, Juji; Goto, Minoru; Adachi, Kyoichi; Nakano, Juki

PATENT ASSIGNEE(S): Kumiai Chemical Industry Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05331012	A2	19931214	JP 1992-163612	19920530

OTHER SOURCE(S): MARPAT 121:102017

AB The compns. contain inclusion compd. of cyclodextrin and 1-[O-isopropyl-3-(3,3-dimethylbutoxy)benzohydroximoyl]-1H-1,2,4-triazole derivs. The compns. have potent insecticidal activities at low concns. for an extended period.

IC ICM A01N043-50
ICS A01N043-653; A01N055-00; C07D249-08

ICA C07D233-61

CC 5-4 (Agrochemical Bioregulators)
Section cross-reference(s): 28

ST benzohydroximoyltriazole **deriv** prepn insecticide

IT Agrochemical formulations
Insecticides
(inclusion compds. contg. cyclodextrins and triazole **derivs.** for)

IT 78-77-3, Isobutyl bromide
RL: BIOL (Biological study)
(condensation of, with triazole **deriv.** for insecticide prepn.)

IT **153719-95-0 153719-96-1 153719-97-2 153719-98-3 153719-99-4**
RL: BIOL (Biological study)
(insecticidal formulation contg.)

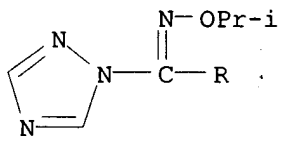
IT **153719-95-0 153719-96-1 153719-97-2 153719-98-3 153719-99-4**
RL: BIOL (Biological study)
(insecticidal formulation contg.)

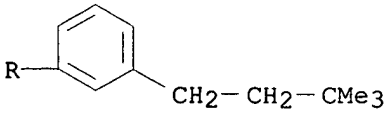
RN 153719-95-0 HCAPLUS

CN .beta.-Cyclodextrin, compd. with 1-[[3-(3,3-dimethylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-36-8
CMF C18 H26 N4 O



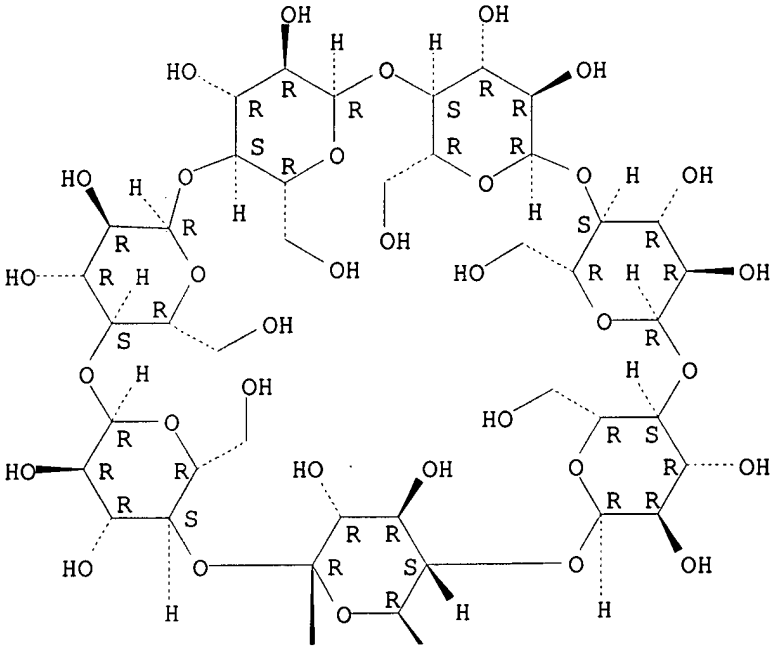


CM 2

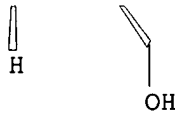
CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



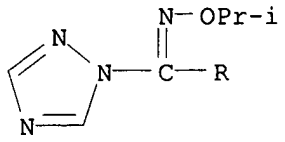
PAGE 2-A

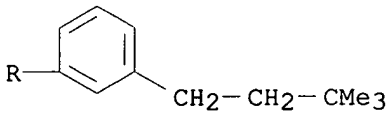


RN 153719-96-1 HCAPLUS
CN .alpha.-Cyclodextrin, compd. with 1-[[3-(3,3-dimethylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-36-8
CMF C18 H26 N4 O

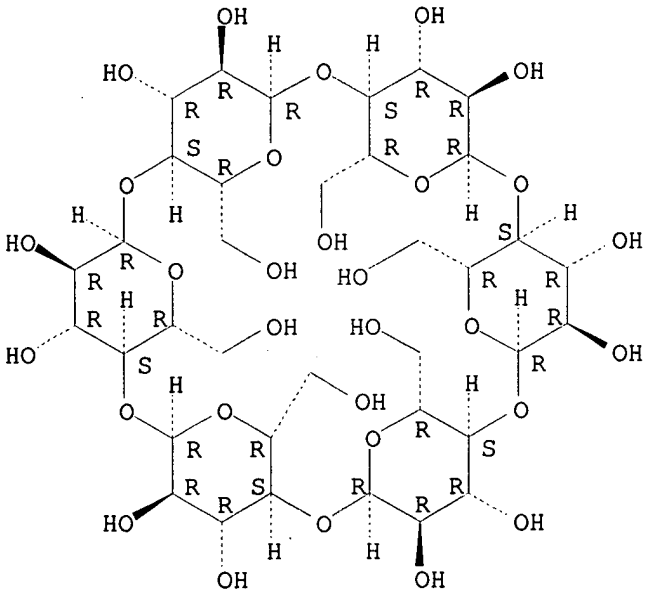




CM 2

CRN 10016-20-3
CMF C36 H60 O30
CDES 6:A-CYCLODEXTRIN

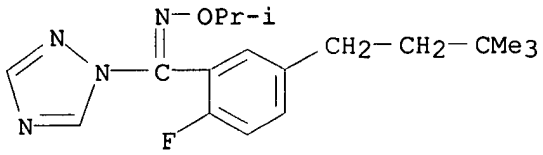
Absolute stereochemistry.



RN 153719-97-2 HCAPLUS
CN .beta.-Cyclodextrin, compd. with 1-[[5-(3,3-dimethylbutyl)-2-fluorophenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-69-7
CMF C18 H25 F N4 O

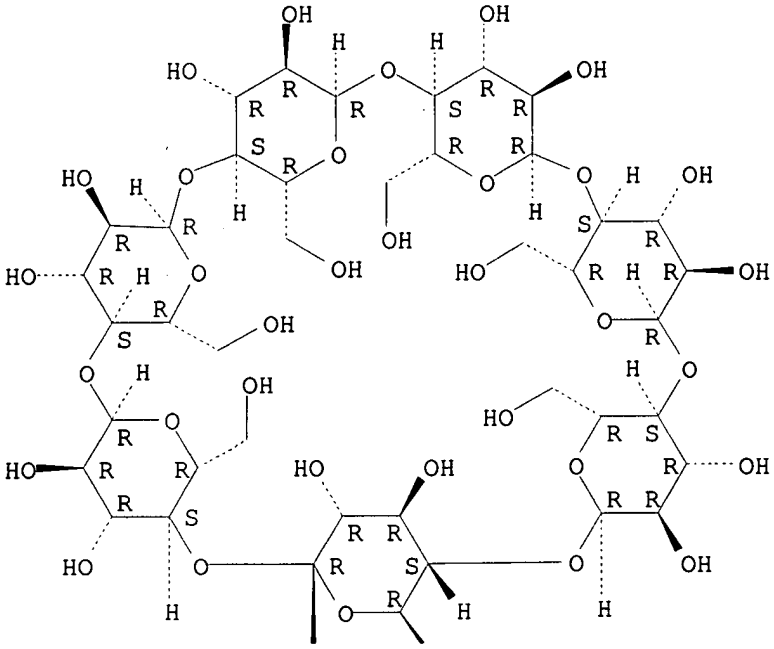


CM 2

CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



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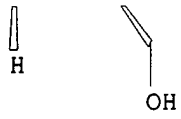
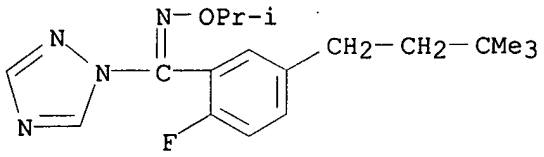


RN 153719-98-3 HCAPLUS
CN .gamma.-Cyclodextrin, compd. with 1-[[5-(3,3-dimethylbutyl)-2-fluorophenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

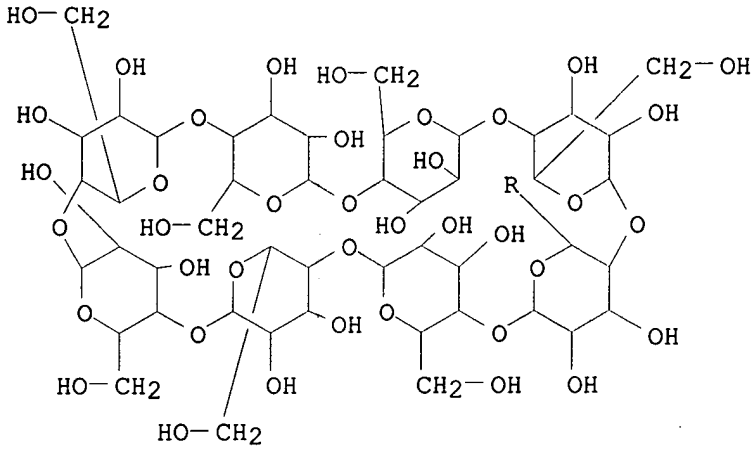
CM 1

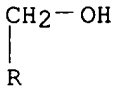
CRN 144802-69-7
CMF C18 H25 F N4 O



CM 2

CRN 17465-86-0
CMF C48 H80 O40
CDES 6:GAMMA-CYCLODEXTRIN

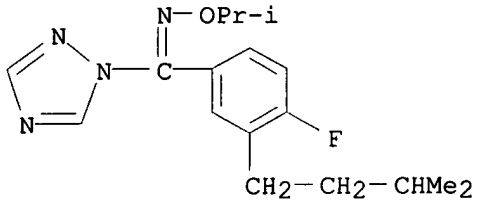




RN 153719-99-4 HCAPLUS
CN .beta.-Cyclodextrin, compd. with 1-[[4-fluoro-3-(3-methylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144801-94-5
CMF C17 H23 F N4 O

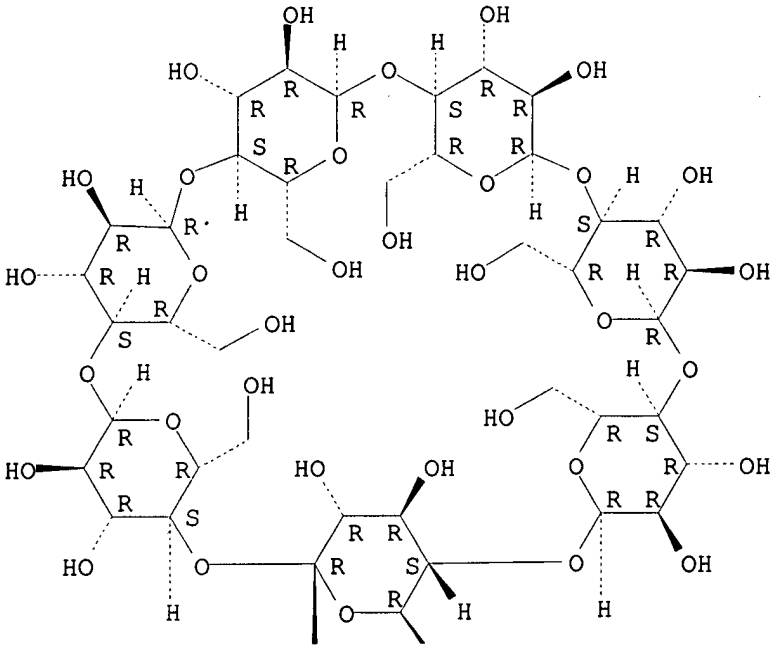


CM 2

CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



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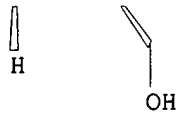
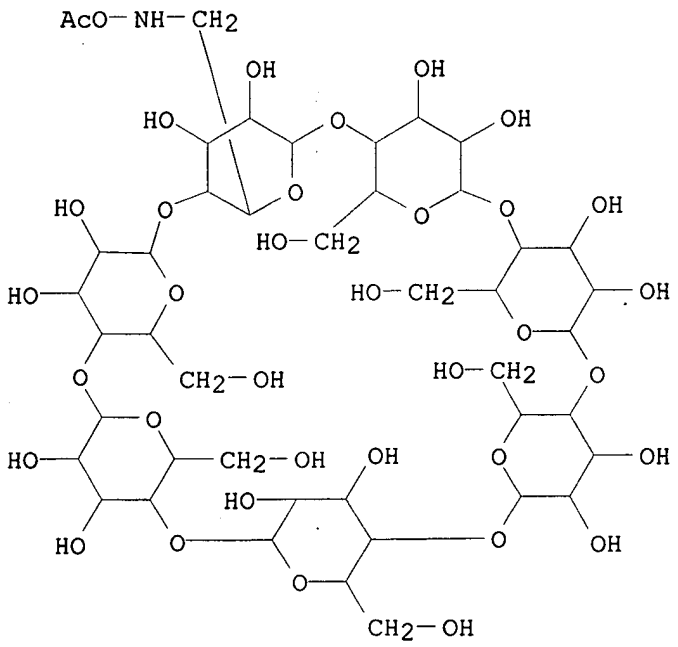


L20 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:511918 HCAPLUS
DOCUMENT NUMBER: 117:111918

TITLE: Preassociating .alpha.-nucleophiles
AUTHOR(S): Fikes, Lewis E.; Winn, David T.; Sweger, Robert W.; Johnson, Morgan P.; Czarnik, Anthony W.
CORPORATE SOURCE: Dep. Chem., Ohio State Univ., Columbus, OH, 43210, USA
SOURCE: J. Am. Chem. Soc. (1992), 114(4), 1493-5
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB .beta.-Cyclodextrin transacylase mimics were prepd. from .beta.-cyclodextran-6-O-tosylate and NH2NH2 or NH2OH.HCl. Both products are readily acylated with p-AcOC6H4NO2, while the hydroxylamine deriv. is also acylated by m-AcOC6H4CMe3.
CC 33-4 (Carbohydrates)
Section cross-reference(s): 22
IT **138435-34-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, kinetics of)
IT **138435-34-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, kinetics of)
RN 138435-34-4 HCAPLUS
CN .beta.-Cyclodextrin, 6A-[(acetyloxy)amino]-6A-deoxy- (9CI) (CA INDEX NAME)



L20 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:429937 HCAPLUS
DOCUMENT NUMBER: 117:29937
TITLE: Composites of cyclodextrin nitrate esters for propellants or explosives
INVENTOR(S): Consaga, John
PATENT ASSIGNEE(S): United States Dept. of the Navy, USA
SOURCE: U. S. Pat. Appl., 12 pp. Avail. NTIS Order No. PAT-APPL-6-728 918.

CODEN: XAXXAV
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 728918	A0	19920215	US 1991-728918	19910708
US 5114506	A	19920519		

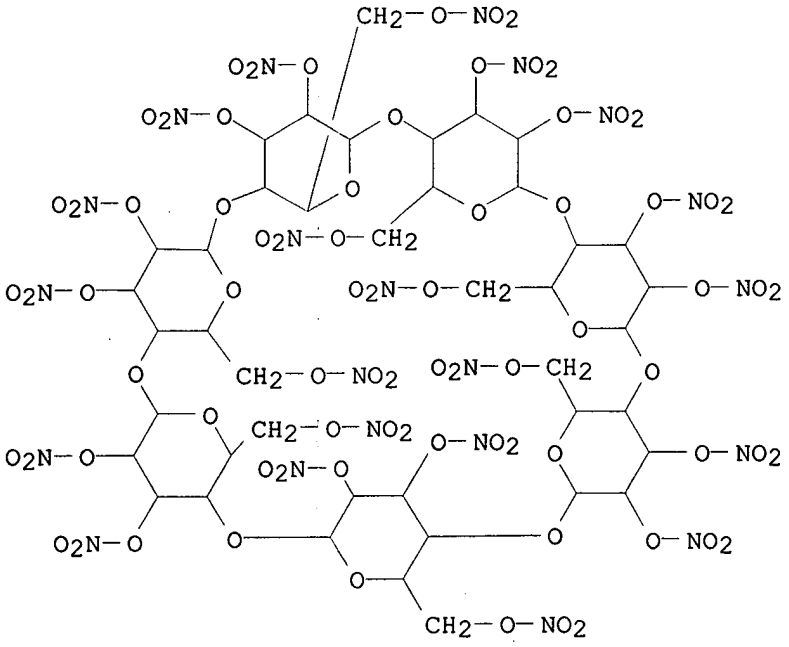
AB An energetic composite comprising (1) a solid nitrate ester of a cyclodextrin or a mixt. of cyclodextrins and (2) an energetic org. nitrate ester plasticizer such as 1,1,1-trimethylolethane trinitrate (TMETN) is useful in gun propellants or explosives. The cyclodextrin nitrate esters are useful as replacements for the less thermally stable and more impact sensitive nitrocellulose.

CC 50-1 (Propellants and Explosives)

IT **138223-83-3**
RL: USES (Uses)
(energetic composite contg. TMETN and, for gun propellants)

IT **138223-83-3**
RL: USES (Uses)
(energetic composite contg. TMETN and, for gun propellants)

RN 138223-83-3 HCAPLUS
CN .beta.-Cyclodextrin, heneicosanitrate (9CI) (CA INDEX NAME)



L20 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:41871 HCAPLUS
DOCUMENT NUMBER: 116:41871
TITLE: Assignment of the proton, carbon-13, and nitrogen-15 resonances in cyclodextrin nitrates by 2D NMR and the determination of the regioselectivity of the hydroxylamine-induced denitration reactions

AUTHOR(S): Bulusu, S.; Axenrod, T.; Liang, B.; He, Y.; Yuan, L.
CORPORATE SOURCE: Dev. Eng. Cent., U. S. Army Armaments Res., Picatinny Arsenal, NJ, 07806-5000, USA
SOURCE: Magn. Reson. Chem. (1991), 29(10), 1018-23
CODEN: MRCHEG; ISSN: 0749-1581
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hexakis(2,3,6-tri-O-nitro)-.alpha.-cyclodextrin and heptakis(2,3,6-tri-O-nitro)-.beta.-cyclodextrin were prepd. and the complete assignment of the 1H, 13C, and 15N resonance signals in each case was achieved using homonuclear shift correlation expts., one-bond 13C-1H and three-bond 15N-O-C-1H heteronuclear shift correlation measurements. The denitration of these cyclodextrin nitrates by hydroxylamine in pyridine was investigated to study its selectivity in prepg. partially nitrated derivs. of these cyclodextrins. The sites of denitration were detd. in each case using 13C and 15N NMR and the products were completely characterized. The results indicate that denitration of these cyclodextrin nitrates is a highly regiospecific reaction occurring at the 2-position only and giving rise to hexakis(3,6-di-O-nitro)-.alpha.-cyclodextrin and heptakis(3,6-di-O-nitro)-.beta.-cyclodextrin, resp.

CC 33-4 (Carbohydrates)
Section cross-reference(s): 22

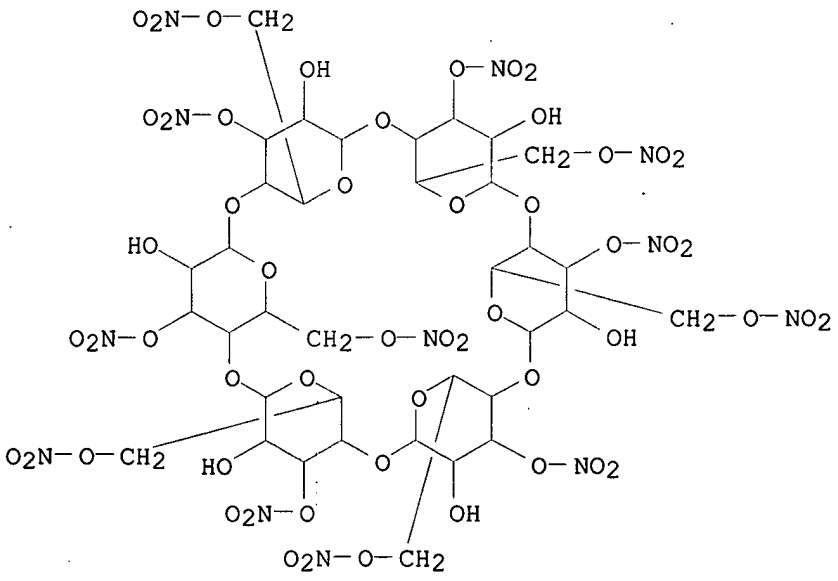
IT **138223-84-4P 138223-85-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and NMR spectra of, proton, carbon-13 , and nitrogen-15)

IT **138223-82-2P 138223-83-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and regioselective denitration of, with hydroxylamine, NMR in relation to)

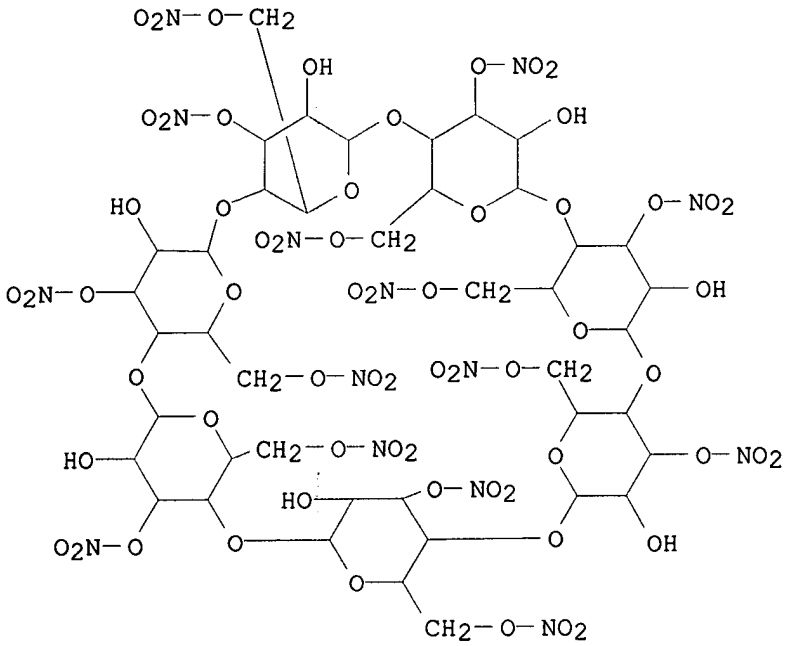
IT **138223-84-4P 138223-85-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and NMR spectra of, proton, carbon-13 , and nitrogen-15)

RN 138223-84-4 HCAPLUS

CN .alpha.-Cyclodextrin, 3A,3B,3C,3D,3E,3F,6A,6B,6C,6D,6E,6F-dodecanitrate (9CI) (CA INDEX NAME)

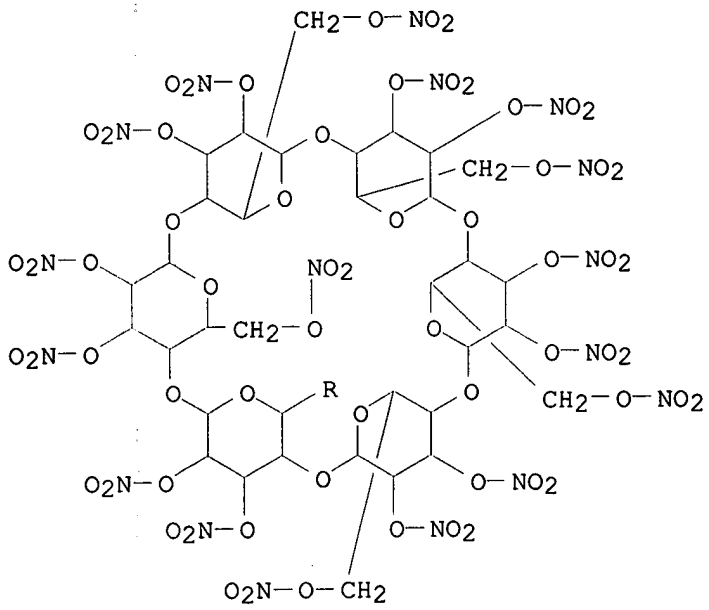


RN 138223-85-5 HCAPLUS
CN .beta.-Cyclodextrin, 3A,3B,3C,3D,3E,3F,3G,6A,6B,6C,6D,6E,6F,6G-tetradecanitrate (9CI) (CA INDEX NAME)



IT **138223-82-2P 138223-83-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and regioselective denitration of, with hydroxylamine, NMR in relation to)
RN 138223-82-2 HCAPLUS
CN .alpha.-Cyclodextrin, octadecanitrate (9CI) (CA INDEX NAME)

PAGE 1-A



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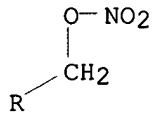
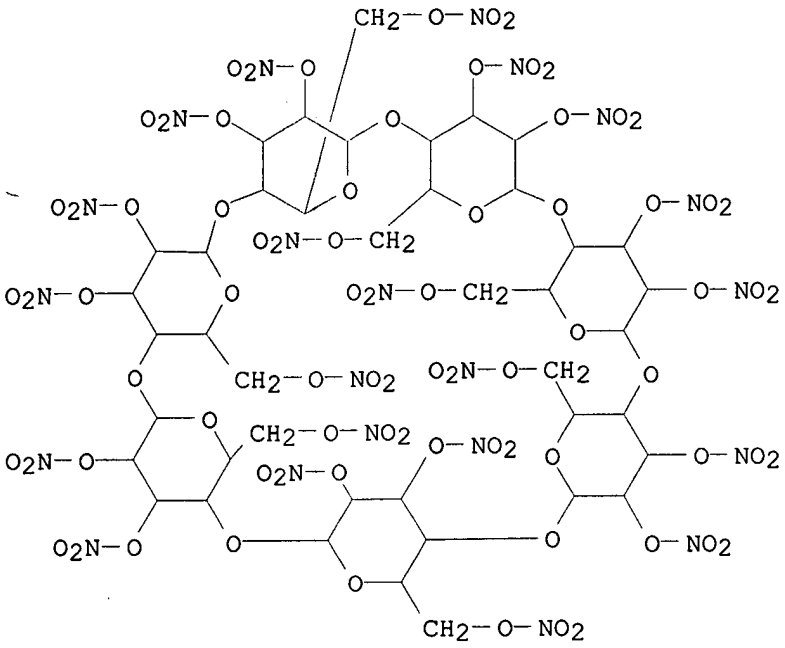


RN 138223-83-3 HCAPLUS
CN .beta.-Cyclodextrin, heneicosanitrate (9CI) (CA INDEX NAME)



L20 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:621768 HCAPLUS
DOCUMENT NUMBER: 115:221768
TITLE: .beta.-Cyclodextrin bound retrohydroxamate ferrioxamines. Chiral iron(III) coordination and biological activity of synthetic siderophores
AUTHOR(S): Akiyama, Masayasu; Katoh, Akira; Kato, Junichi; Takahashi, Keiko; Hattori, Kenjiro
CORPORATE SOURCE: Dep. Appl. Chem., Tokyo Univ. Agric. and Technol., Tokyo, 184, Japan
SOURCE: Chem. Lett. (1991), (7), 1189-92
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English

AB R[NH(CH2)5((O)N(OH)(CH2)2C(O)]3NHQ (HQ = .beta.-cyclodextrin; R = Ac, C(O)OCMe3) synthetic siderophores that mimic linear and cyclic desferrioxamines were prepd. These synthetic siderophores form stable 1:1 Fe(III) complexes with a .DELTA.-selective coordination and show the growth promotion activity when tested with Aureobacterium flavescens.

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 10

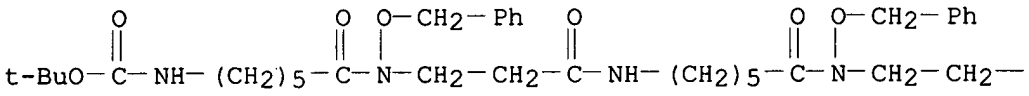
IT **136429-46-4P 136429-48-6P**
RL: RCT (Reactant); PREP (Preparation)
(formation and hydrogenation of)

IT **136429-46-4P 136429-48-6P**
RL: RCT (Reactant); PREP (Preparation)
(formation and hydrogenation of)

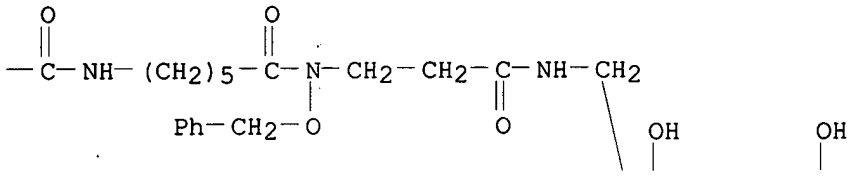
RN 136429-46-4 HCAPLUS

CN .beta.-Cyclodextrin, 6A-deoxy-6A-[[3-[[6-[[3-[[6-[[3-[[6-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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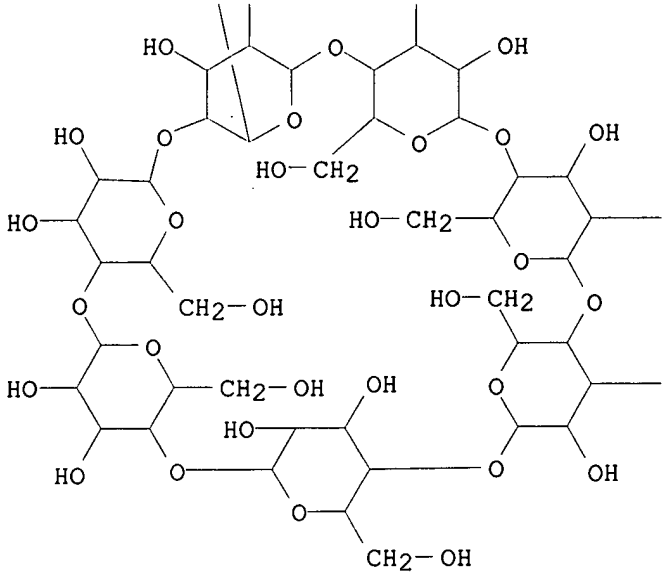


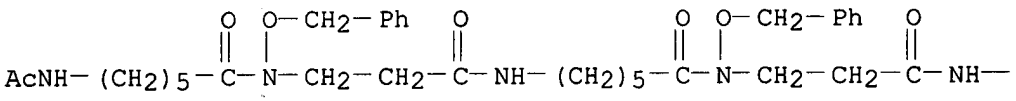
PAGE 2-C

— OH

— OH

RN 136429-48-6 HCAPLUS
CN .beta.-Cyclodextrin, 6A-[[3-[[6-[[3-[[6-[[3-[[6-(acetylamino)-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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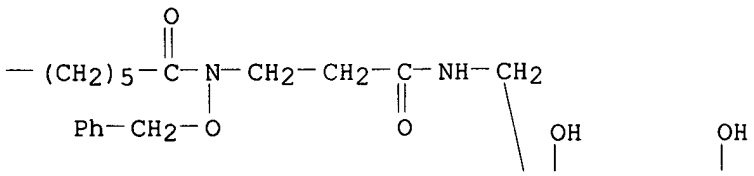
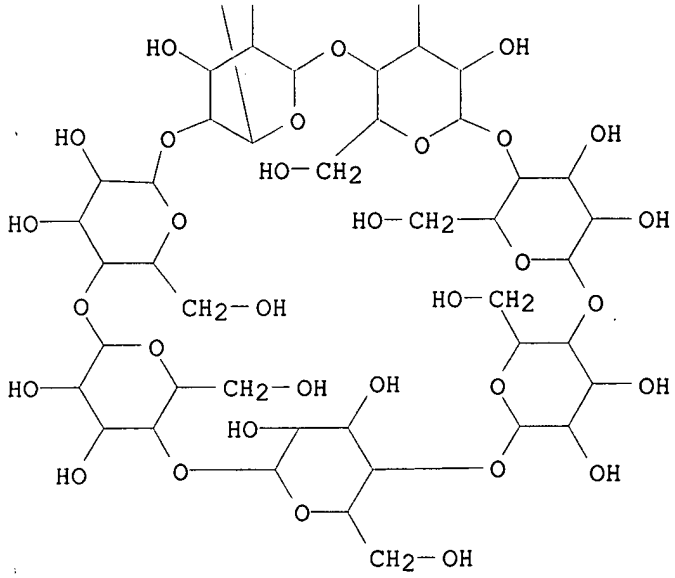


PAGE 2-B



L20 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:192366 HCAPLUS
DOCUMENT NUMBER: 114:192366
TITLE: Effect of diethyl .beta.-cyclodextrin on the release of nitroglycerin from formulations
AUTHOR(S): Umemura, Masashi; Ueda, Haruhisa; Tomono, Kazuo; Nagai, Tsuneji
CORPORATE SOURCE: Fac. Pharm. Sci., Hoshi Univ., Tokyo, 142, Japan
SOURCE: Drug Des. Delivery (1990), 6(4), 297-310
CODEN: DDDEEJ; ISSN: 0884-2884
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The complex-forming abilities of 2,6-di-O-ethyl-.beta.-cyclodextrin (DE-.beta.-CD), and its effect on the release of nitroglycerin (TNG) from formulations of the compd., were studied and compared with corresponding properties of .beta.-cyclodextrin (.beta.-CD) and 2,6-di-O-methyl-.beta.-cyclodextrin (DM-.beta.-CD). Complex formation was confirmed by DSC and IR absorption spectroscopy. In an accelerator test involving temp. and reduced pressure, marked depression of the volatility of TNG was obsd. as a result of CD complex formation. Dissoln. rats of TNG from powdery TNG/DE-.beta.-CD complex and its tablets were retarded in comparison with the rates from other CD complexes. The release rate of TNG from ointments was accelerated by complexation with DE-.beta.-CD, and retarded by complexation with .beta.-CD. To evaluate their in vivo percutaneous absorption, samples were applied to the inside tip of the check pouch of male golden hamsters. The amt. of TNG remaining in the cheek pouch was lowest in the case of the TNG/DE-.beta.-CD complex ointment, and relatively high in the case of the TNG/.beta.-CD complex ointment, in agreement with the in vitro results. The combination of DE-.beta.-CD complex and .beta.-CD complex might be applicable to sustained-release prepns. for percutaneous administration.

CC 63-5 (Pharmaceuticals)
ST nitroglycerin absorption release formulation; diethyl cyclodextrin nitroglycerin formulation; cyclodextrin **deriv** nitroglycerin

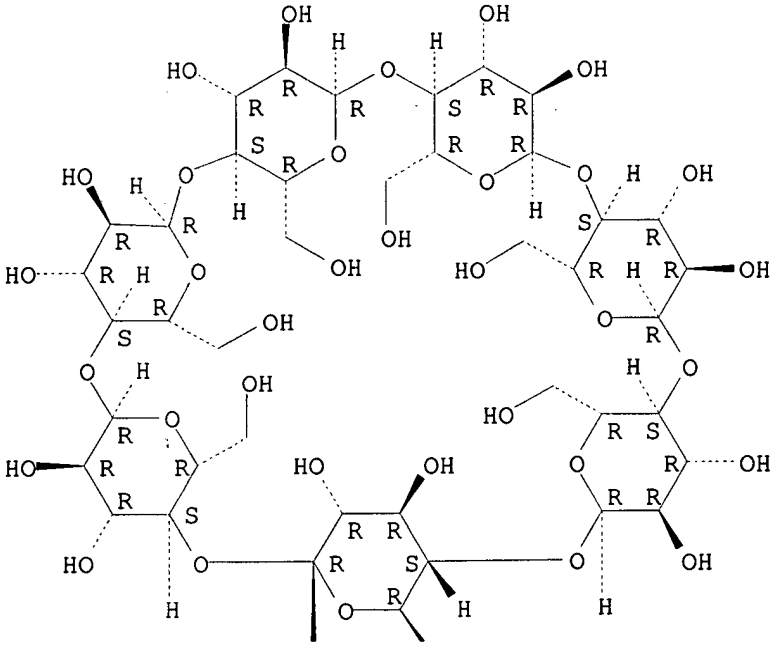
formulation
IT **69709-16-6**, Nitroglycerin-.beta.-cyclodextrin complex (1:1)
133461-81-1 133485-38-8
RL: BIOL (Biological study)
(formation and drug absorption and release from buccal ointments and tablets contg.)
IT **69709-16-6**, Nitroglycerin-.beta.-cyclodextrin complex (1:1)
133461-81-1 133485-38-8
RL: BIOL (Biological study)
(formation and drug absorption and release from buccal ointments and tablets contg.)
RN 69709-16-6 HCAPLUS
CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

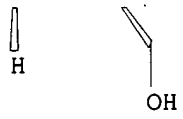
CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A

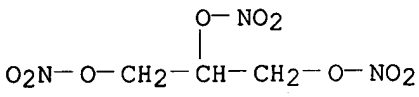


PAGE 2-A



CM 2

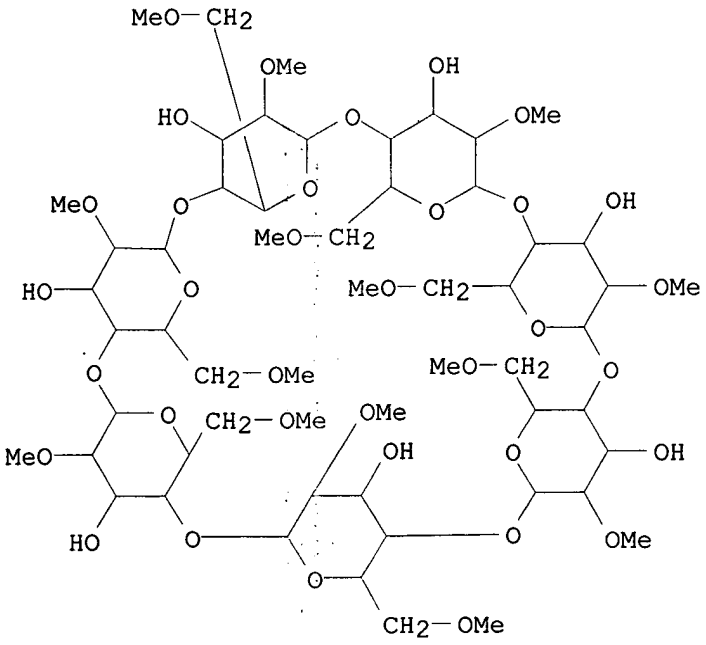
CRN 55-63-0
CMF C3 H5 N3 O9



RN 133461-81-1 HCAPLUS
CN .beta.-Cyclodextrin, 2A,2B,2C,2D,2E,2F,2G,6A,6B,6C,6D,6E,6F,6G-tetradeca-O-methyl-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

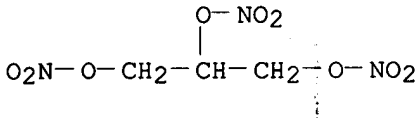
CM 1

CRN 51166-71-3
CMF C56 H98 O35
CDES 6:B-CYCLODEXTRIN



CM 2

CRN 55-63-0
CMF C3 H5 N3 O9



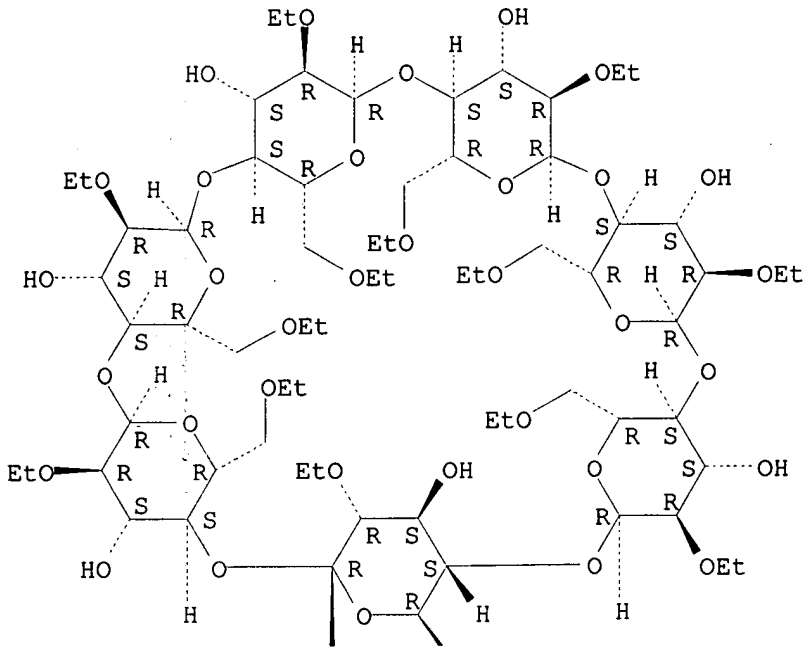
RN 133485-38-8 HCAPLUS
CN .beta.-Cyclodextrin, 2A,2B,2C,2D,2E,2F,2G,6A,6B,6C,6D,6E,6F,6G-tetradeca-O-ethyl-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

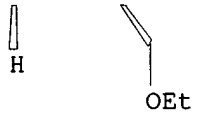
CRN 111689-03-3
CMF C70 H126 O35

Absolute stereochemistry.

PAGE 1-A

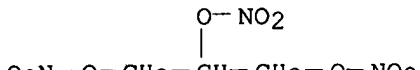


PAGE 2-A



CM 2

CRN 55-63-0
CMF C3 H5 N3 O9



L20 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:619185 HCAPLUS
DOCUMENT NUMBER: 111:219185
TITLE: Interaction of nitroglycerin with 6-O-.alpha.-maltosylcyclomaltoheptose
AUTHOR(S): Tomono, Kazuo; Gotoh, Hiroko; Okamura, Makoto; Saitoh, Taroh; Ueda, Haruhisa; Nagai, Tsuneji
CORPORATE SOURCE: Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan
SOURCE: Carbohydr. Res. (1989), 192, 351-6
CODEN: CRBRAT; ISSN: 0008-6215
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The complexation of nitroglycerin (I) with 6-O-.alpha.-maltosyl-.beta.-cyclodextrin (G2-.beta.CD) in comparison with that of .beta.CD and other .beta.CD derivs. was studied. On complexation, 4 signals of I were shifted to higher field and 2 were shifted to lower field. The chem. shift data were similar for the I-G2-.beta.CD and I-.beta.CD systems, and suggest that I mol. was included partially in the cavity of G2-.beta.CD and .beta.CD. The volatility of I was decreased greatly on complexation and there was no significant difference between the complexes. I in all complexes degraded in alk. soln., the rat of degrdn. increasing in the series .beta.CD<G2-.beta.CD<di-Me .beta.CD<CD.

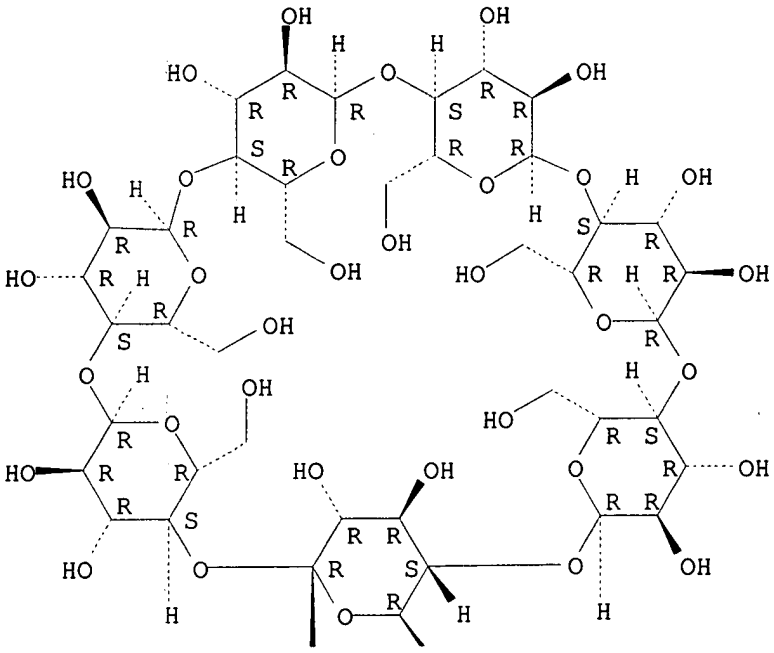
CC 63-5 (Pharmaceuticals)
ST nitroglycerin cyclodextrin **deriv** inclusion complexation; maltosylcyclomaltoheptose nitroglycerin inclusion complexation
IT **69709-16-6P**, Nitroglycerin-.beta.-cyclodextrin inclusion complex (1:1) **123830-30-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)
IT **69709-16-6P**, Nitroglycerin-.beta.-cyclodextrin inclusion complex (1:1) **123830-30-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)
RN 69709-16-6 HCAPLUS
CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

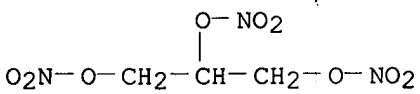
PAGE 1-A



PAGE 2-A

CM 2

CRN 55-63-0
CMF C3 H5 N3 O9



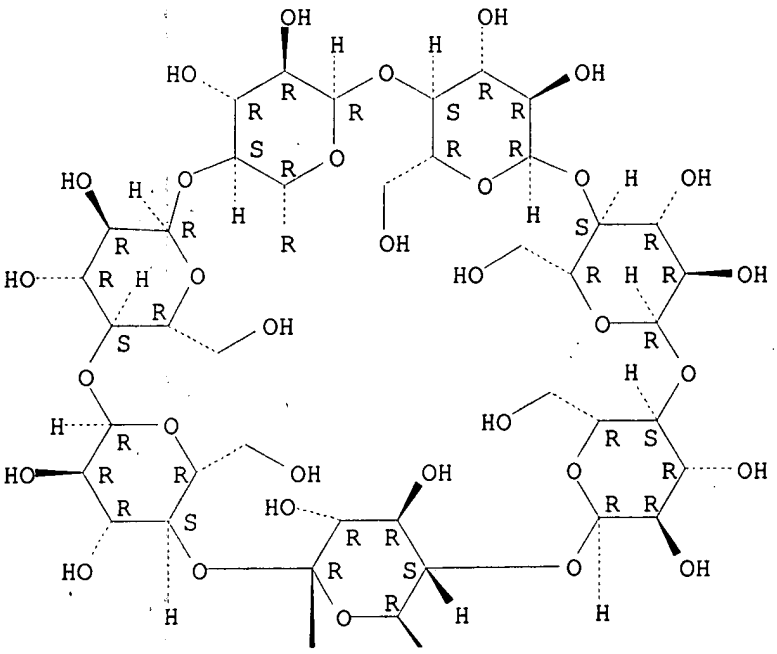
RN 123830-30-8 HCAPLUS
CN .beta.-Cyclodextrin, O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-.alpha.-D-glucopyranosyl-(1.fwdarw.6A)-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

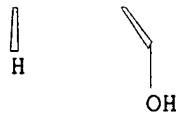
CRN 104723-60-6
CMF C54 H90 O45

Absolute stereochemistry.

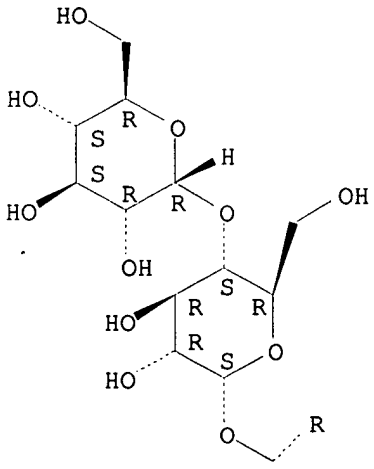
PAGE 1-A



PAGE 2-A

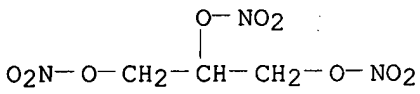


PAGE 3-A



CM 2

CRN 55-63-0
CMF C3 H5 N3 O9



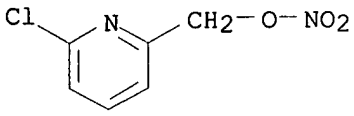
L20 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:95468 HCAPLUS
DOCUMENT NUMBER: 104:95468
TITLE: Topical pharmaceuticals containing 2-nitrooxymethyl-6-chloropyridine-.beta.-cyclodextrin inclusion compound
INVENTOR(S): Ueda, Yoshio; Shimojo, Fumio; Yoshida, Kiyoshige
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60156607	A2	19850816	JP 1984-12656	19840125

AB Topical formulations contain 2-nitrooxymethyl-6-chloropyridine (I), or its .beta.-cyclodextrin inclusion compd., for treatment of blood vessel disorders. The bioavailability of I via transdermal administration is better than that via oral route. Thus, a Macrogol ointment contg. I-.beta.-cyclodextrin inclusion compd. (mol. ratio 1:1) was prepd.
IC ICM A61K009-06
ICS A61K031-44; A61K047-00; C07D213-61
CC 63-6 (Pharmaceuticals)
ST pyridine nitrooxymethyl cyclodextrin pharmaceutical; cyclodextrin nitrooxymethylpyridine pharmaceutical; inclusion compd cyclodextrin pyridine **deriv**
IT **98213-09-3 100509-03-3**
RL: BIOL (Biological study)
(topical pharmaceuticals contg., for blood vessel disorder treatment)
IT **98213-09-3 100509-03-3**
RL: BIOL (Biological study)
(topical pharmaceuticals contg., for blood vessel disorder treatment)
RN 98213-09-3 HCAPLUS
CN .beta.-Cyclodextrin, compd. with (6-chloro-2-pyridinyl)methyl nitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 90500-72-4
CMF C6 H5 Cl N2 O3

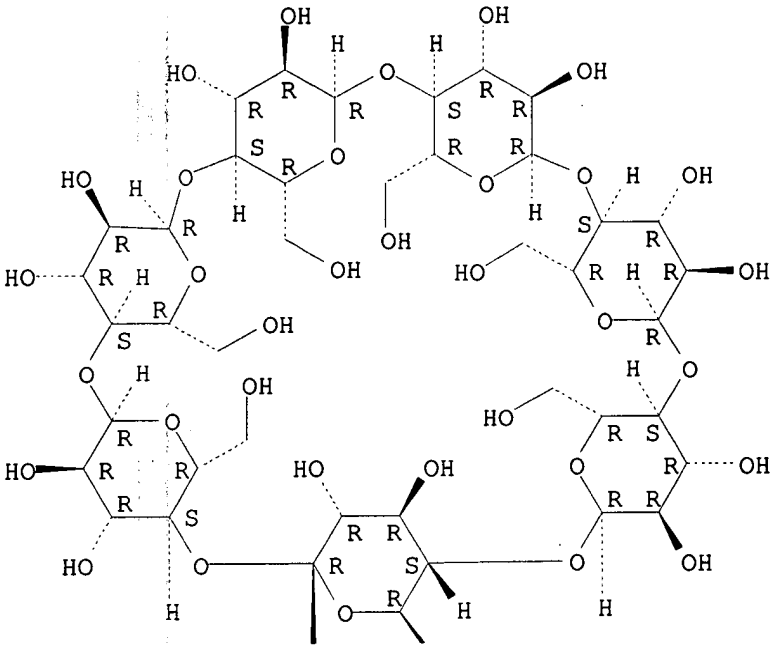


CM 2

CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



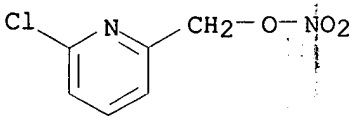
PAGE 2-A

RN 100509-03-3 HCAPLUS
CN .beta.-Cyclodextrin, compd. with (6-chloro-2-pyridinyl)methyl nitrate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 90500-72-4

CMF C6 H5 Cl N2 O3

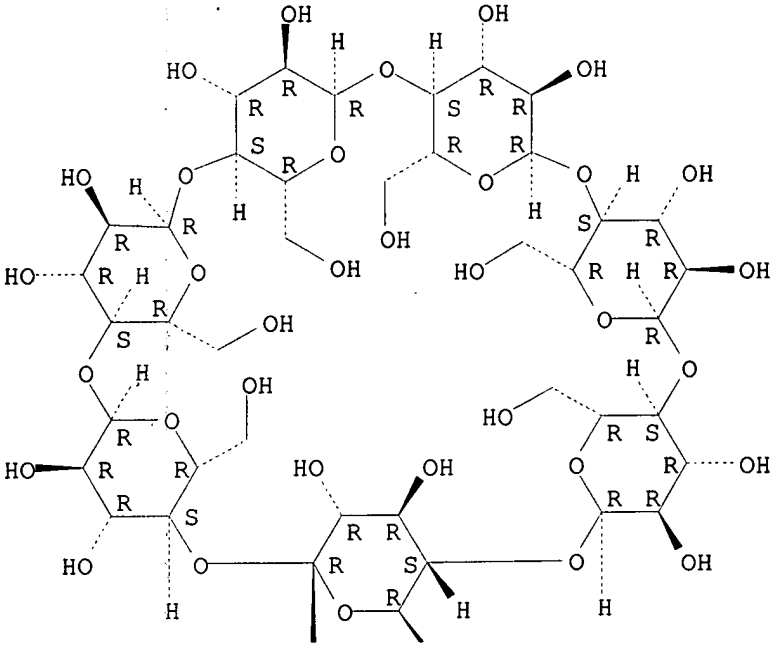


CM 2

CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



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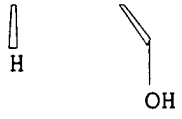


L20 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:506576 HCAPLUS
DOCUMENT NUMBER: 103:106576
TITLE: Electron microscopic study of cyclodextrin

derivatives

AUTHOR(S): Hodi, Klara; Kata, Michael
CORPORATE SOURCE: Dep. Pharm. Technol., Szeged Univ. Med. Sci., Szeged, H-6701, Hung.
SOURCE: Starch/Staerke (1985), 37(6), 205-8
CODEN: STARDD; ISSN: 0038-9056
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Electron microscopic investigations .alpha.- [10016-20-3], .beta.- [7585-39-9], and .gamma.-cyclodextrin [17465-86-0], di-Me .beta.-cyclodextrin [95176-10-6], crosslinked cyclodextrin (block polymer), and nitroglycerin-.beta.-cyclodextrin inclusion compd. [**69709-16-6**] are described.

CC 44-6 (Industrial Carbohydrates)

IT 7585-39-9 10016-20-3 12619-70-4D, polymers 17465-86-0
69709-16-6 95176-10-6
RL: PROC (Process)
(morphol. and electron microscopy of)

IT **69709-16-6**
RL: PROC (Process)
(morphol. and electron microscopy of)

RN 69709-16-6 HCAPLUS

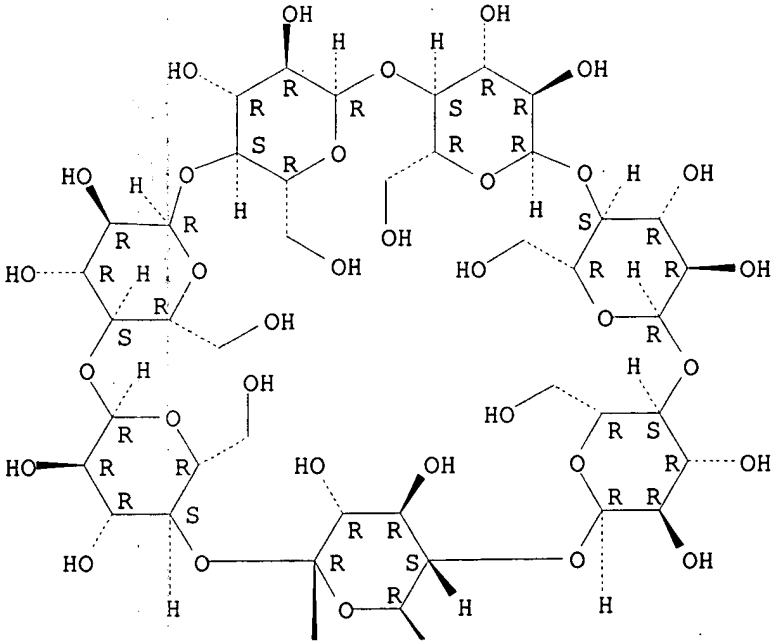
CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

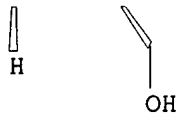
CRN 7585-39-9
CMF C42 H70 O35
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A

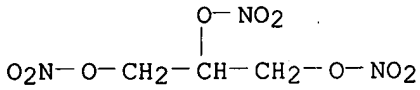


PAGE 2-A



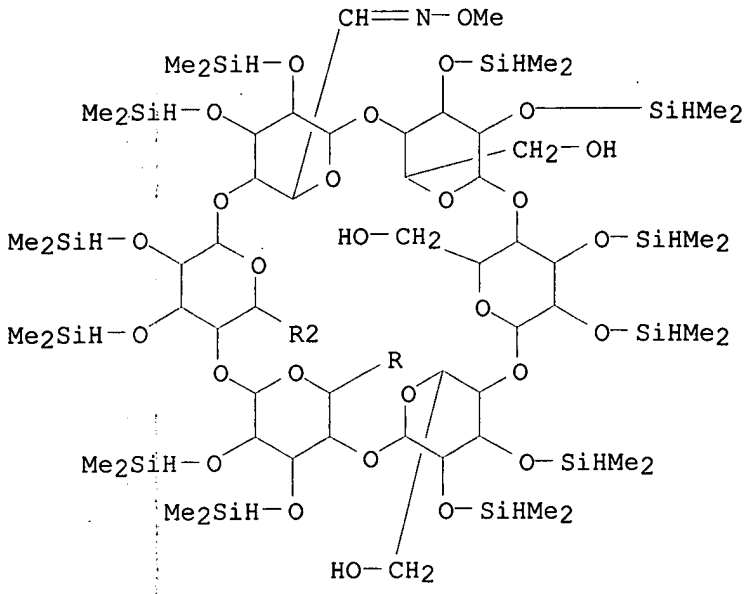
CM 2

CRN 55-63-0
CMF C3 H5 N3 O9

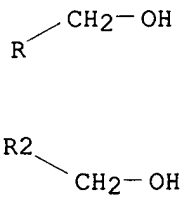


L20 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:73336 HCAPLUS
DOCUMENT NUMBER: 82:73336
TITLE: .omega.-Aldehydo sugars prepared by ninhydrin oxidation
AUTHOR(S): Gibson, Alan R.; Melton, Laurence D.; Slessor, Keith N.
CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, B. C., Can.
SOURCE: Can. J. Chem. (1974), 52(23), 3905-12
CODEN: CJCHAG
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 6-Aldehydocyclohexa-amylose and 1,2:3,4-di-O-isopropylidene-.alpha.-D-galacto-hexodialdo-1,5-pyranose were prepd. by oxidative deamination of 6-amino-6-deoxycyclohexaamylose and 6-amino-6-deoxy-1,2:3,4-di-O-isopropylidene-.alpha.-D-galactopyranose, resp., using ninhydrin. The prepn. of the two aldehydes by the ninhydrin reaction is compared with the photolysis of the corresponding azido sugars. The mass spectra of the perdimethylsilyl derivs. of cyclohexaamylose and O-methyl oxime of 6-aldehydocyclohexaamylose were recorded.
CC 33-3 (Carbohydrates)
Section cross-reference(s): 22
IT 4711-01-7P 4933-77-1P 20581-77-5P 55018-87-6P **55018-88-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT **55018-88-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 55018-88-7 HCAPLUS
CN .alpha.-Cyclodextrin, 6A-deoxy-2A,2B,2C,2D,2E,2F,3A,3B,3C,3D,3E,3F-dodecakis-O-(dimethylsilyl)-6A-(methoxyimino)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



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     FILE 'WPIDS' ENTERED AT 13:29:19 ON 14 MAR 2002
L1          4481 S CYCLODEXTRIN? OR CYCLO (2W) DEXTRIN#
L2           860 S ?AMINOXY? OR ?AMINO OXY?
L3             2 S L1 AND L2
L4           539 S ?AMINOOXY? OR ?AMINO OXY?
L5             2 S L1 AND L4

     FILE 'WPIDS' ENTERED AT 13:32:49 ON 14 MAR 2002

=> d .wp 1-2

L5   ANSWER 1 OF 2  WPIDS COPYRIGHT 2002   DERWENT INFORMATION LTD
AN   1999-540817 [45]   WPIDS
DNC  C1999-158030
TI   New aminooxy-cyclodextrin derivatives, useful as
     complexants, solubilizers, carbonyl reagents, catalysts or intermediates.
DC   A96 B04 B07 C03 C07 D21
IN   KHOMUTOV, A R; KHOMUTOV, R M; KORPELA, T; YAKOVLEV, D Y
PA   (KHOM-I) KHOMUTOV A R; (KHOM-I) KHOMUTOV R M; (KORP-I) KORPELA T; (YAKO-I)
     YAKOVLEV D Y
CYC  84
PI   WO 9945032    A1 19990910 (199945)* EN   36p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ UG ZW
         W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD
            GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
            MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
            UA UG US UZ VN YU ZW
     AU 9926279    A  19990920 (200007)
     EP 1090041    A1 20010411 (200121)  EN
         R: DE DK ES FI FR GB IT NL SE
ADT  WO 9945032 A1 WO 1999-FI167 19990304; AU 9926279 A AU 1999-26279 19990304;
     EP 1090041 A1 EP 1999-906292 19990304, WO 1999-FI167 19990304
FDT  AU 9926279 A Based on WO 9945032; EP 1090041 A1 Based on WO 9945032
PRAI FI 1998-489      19980304
AB   WO   9945032 A UPAB: 19991103
```

NOVELTY - **Aminooxy-cyclodextrins** (I) are new. Also new are protected, oxime, nucleotide and nucleoside derivatives of (I).

DETAILED DESCRIPTION - **Aminooxy-cyclodextrins** of formula CD-(X-Y-ONH2)n (I) and their **aminooxy** protected derivatives (especially with ethoxy-ethylidene protected **aminooxy**) are new:

CD = mono- or polydeoxy alpha -, beta - or gamma - **cyclodextrin**, carrying the X-Y-ONH2 group(s) in the 6-, 3- and/or 2-position(s) and optionally carrying further substituent(s) in the 6-, 3- and/or 2-position(s);

Y = linker group; and

X = functional group or atom necessary to connect Y and CD;

or X, Y = direct bonds;

n = 1-24 for alpha -**cyclodextrins**, 1-21 for beta - **cyclodextrins** or 1-18 for gamma -**cyclodextrins**.

INDEPENDENT CLAIMS are included for:

(a) novel oximes of (I) with synthetic or natural aldehydes or ketones (specifically acetone);

(b) derivatives of pyrimidine or purine nucleotides or nucleosides with **aminooxy-cyclodextrins** (not restricted to (I)), where the **aminooxy** group is linked to the heterocyclic ring, preferably through pyrimidine C-4 and purine C-6; and

(c) the preparation of (I).

USE - (I) can be used as complexants, solubilizers, carbonyl reagents (which may inhibit certain enzymes in the metabolism of cells), catalysts or starting materials for the synthesis of products to be used in pharmaceuticals, cosmetics, agriculture or in science laboratories. Typically (I) can be used for the preparation of stable oximes; immobilized on solid supports to give chromatographic materials; (in the case of polyfunctional (I)) reacted with dialdehydes or diketone to give polymers for use as semipermeable or stereospecific membranes or slow-release carriers; or used to prepare inclusion complexes (e.g. for stabilizing steroids, prostaglandins or vitamins) or for recovery of metal ions from solution.

ADVANTAGE - The oxime group is stable in aqueous solution, and allows a wide range of further conversions and applications. (I) are more stable than alkylamino-**cyclodextrin** analogs and can be prepared without using highly alkaline pH conditions.

Dwg.0/4

L5 ANSWER 2 OF 2 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1990-069155 [10] WPIDS
DNC C1990-030273
TI Treating occlusive vascular diseases - using compsn. contg. piperidinyl-cyclopentyl 4-heptenoic acid deriv. and pentanoic acid deriv..
DC B03 C02
IN HUMPHREY, P P A; LUMLEY, P
PA (GLAX) GLAXO GROUP LTD
CYC 12
PI EP 357465 A 19900307 (199010)* EN 7p
R: AT BE CH DE FR GB IT LI NL SE
JP 02149521 A 19900608 (199029)
US 4968703 A 19901106 (199047)
ADT EP 357465 A EP 1989-309093 19890830; JP 02149521 A JP 1989-221878 19890830; US 4968703 A US 1989-379372 19890713
PRAI GB 1988-20578 19880831; GB 1986-19450 19860808
AB EP 357465 A UPAB: 19930928
Pharmaceutical compositions containing the thromboxane receptor blocker, (1R-(alpha(Z),2beta,3beta,5alpha)) -(+)-7-(5-((1,1'-biphenyl)-4-yl) methoxy)-3-hydroxy-2-(1-piperidinyl) cyclopentyl)-4 heptenoic acid (Cpd.

A) or a salt, solvate or **cyclodextrin** complex thereof, acts synergistically with a thromboxane synthase inhibitor, (E)-5-(((-5-((((3-pyridinyl) (3-(tri-fluoromethyl) phenyl) methylen) **amino**) **oxy**) pentanoic acid (Cpd. B).

USE/ADVANTAGE - Inhibition of blood platelet aggregation, and more specifically (1) treatment or prohylaxis of occlusive vascular diseases (claimed); (2) prophylaxis of cyclosparin A-induced nephrotoxicity (claimed); (3) treatment of asthma (claimed); (4) treatment of adult respiratory distress syndrome (claimed). In unit doses of 3.5 to 100 mg for Cpd. A and 5 to 500 mg for Cpd. B, administered 1 to 4 times daily, either simultaneously, sequentially or in combination. Cpd. A in combination with Cpd. B has a better biological profile of action, than the combination of Cpd. A and other thromboxane synthase inhibitors, such as dazoxiben or CV 4151 (as reported in EP-A-256805).

0/0